PERQUIMANS COUNTY LAND USE UPDATE

Prepared with assistance from the Albermarle Commission

November 1987

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration

HD 211 .N8 P47 1987

COASTAL ZONE

INFORMATION CENTER

Perquimans County Land Use Plan Update

Adopted November 30, 1987

Certified By CRC December 5, 1987

Perquimans County Board of Commissioners

W.W. White, Jr., Chairman of the Board

Lester H. Simpson Thomas D. Nixon William Wray Chappell Wayne Winslow

Property of off Library

U.S. DEPARTMENT OF COMMERCE NOAA COASTAL SERVICES CENTER 2234 SOUTH HOBSON AVENUE CHARLESTON, SC 29405-2413

CHARLESTON, SC 29405-2413 Perquimans County Planning Board

Ed Nixon, Chairman of the Board

Floyd Matthews Johnny Corprew

19210416, FEB 31888

Table of Contents

ESTABLISHMENT OF INFORMATION BASE	1
PREVIOUS POLICY ACHIEVEMENTS: PERQUIMANS COUNTY	.1
Issue Commercial and Becreational Fishing	<u>.</u>
issue: Commercial and recreational Fishing.	3
Issue: Types of Development to be Encouraged Issue: Types and Locations of Industries Desired.	
issue: Types of Development to be Encouraged	3
Issue: Types and Locations of Industries Desired	4
Issue: Redevelopment of Developed Areas	4
Issue: Commitment to State and Federal Programs	4
PRESENT CONDITIONS	
PRESENT CONDITIONS	6
SUMMARY OF PRESENT CONDITIONS	6
POPULATION	7
GEOGRAPHIC DISTRIBUTION	8
POPULATION COMPOSITION	9
RACIAL COMPOSITION	
AGE GROUPS	
SCHOOL AGE	10
FAMILY-FORMING AGE GROUP	11
POTENTIAL LABOR FORCE	
LABOR PARTICIPATION	14
ELDERLY	15
SEX DISTRIBUTION	
PERQUIMANS COUNTY: ECONOMY	18
TOTAL COUNTY OUTPUT	
LAND AND CAPITAL	20
LABOR	
PROFITS	
SOCIAL SECURITY	22
OUTPUT SUMMARY	23
TOTAL PERSONAL INCOME	
FARM INCOME	26
EMPLOYMENT	27
COMMUTING PATTERNS FOR PERQUIMANS COUNTY 1980	28
RETAIL SALES	29
EXISTING LAND USE	31
LAND COMPATIBILITY PROBLEMS	31
PROBLEMS FROM UNPLANNED GROWTH	31
FOREST	
AGRICULTURAL RECREATIONAL ORIENTED COMMUNITIES	33
NEW RESIDENTIAL DEVELOPMENT	22
HOUSING	34
COMMERCIAL AND INDUSTRIAL	33
FUTURE LAND USE	35
EXISTING LAND USE MAP	36
CURRENT PLANS, POLICIES, AND REGULATIONS	
1968 The Potential for Outdoor Recreation in Perquimans County	
1971 The Potential for Outdoor Recreation in Perquimans County	
1975 Proposed County-Wide Water System Engineering Report	
1976 CAMA Land Development Plan	
1977 Preliminary Engineering Report: County Wide Water System Phase II	77
1978 Subdivision Regulations	37

1986 Perquimans County Land Use Plan Update

1978 Housing and Land use Addendum	38
1979 CAMA Land Use Plan Update	38
CONSTRAINTS TO DEVELOPMENT LAND SUITABILITY	3.9
SOILS.	39
DRAINAGE	
SEPTIC TANK LIMITATIONS	40
FOUNDATION LIMITATIONS	41
SOURCES OF WATER SUPPLY	
GROUND WATER	
SURFACE WATER	42
AREAS OF ENVIRONMENTAL CONCERN	43
MANMADE HAZARDS	
HISTORICAL SITES	45
INSTORICAL STEE	
CONSTRAINTS TO DEVELOPMENT:	. 46
WATER SYSTEM	
SEWAGE.	
SOLID WASTE	40
POLICE	
FIRE	
RESCUE SERVICE	
EDUCATIONAL FACILITIES.	48
ROADSIMPACT OF SEASONAL POPULATION	49
PERQUIMANS COUNTY: ESTIMATED DEMAND	# 1
HOUSING	
SCHOOLS	
WATER SERVICE	
SOLID WASTE	
POLICE	
FIRE	
RESCUE SERVICE	
PUBLIC ADMINISTRATION	52
CONTINUING PUBLIC PARTICIPATION IN PLANNING MATTERS	2 1
\cdot	
POLICY DISCUSSION	5.4
	,,,,,,,,,,
POLICY ISSUES: RESOURCE PROTECTION	5 6
ISSUE:Constraints to Development: AEC'S	55
ISSUE:Soil Limitations	56
ISSUÈ:Flood Plain Development	
ISSUE Septic Tank Limitations.	57
ISSUE: Freshwater, Swamps, and Marshes	
ISSUE:Cultural and Historical Resources	
ISSUE: Man-made Hazards and Nuisances	
ISSUE: The Use of Package Treatment Plants	00
ISSUE:Protection of Potable Water Supply	01
ISSUE:Marina and Floating Home Development	
ISSUE:Industrial Impact on Fragile Areas.	63
ISSUE:Development of Sound and Estuarine System	64
DOLLOW TOOLING, DECOUDER DECOUCETON AND MANAGEMENT	
POLICY ISSUES: RESOURCE PRODUCTION AND MANAGEMENT	
ISSUE:Productive Agricultural Lands	
ISSUE:Commercial Forest Land	
ISSUE:Commercial and Recreational Fishing	66

1986 Perquimans County Land Use Plan Update

ISSUE:Existing and Potential Mineral Production	67
ISSUE:Off-Road Recreational Vehicles	67
ISSUE:Residential, and Commercial Land Development	68
POLICY ISSUES: ECONOMIC AND COMMUNITY DEVELOPMENT	
POLICY ISSUES: ECONOMIC AND COMMUNITY DEVELOPMENT	69
ISSUE:Industrial Development Impact on any Resource	69
ISSUE:Peat or Phosphate Mining Impact on any Resource	69
ISSUE: Types and Location of Industry Desired	70
ISSUE:Local Commitment to Provide Services To	70
ISSUE: Types of Urban Growth Patterns Desired	71
ISSUE: Types of Urban Growth Patterns Desired	72
ISSUE: Commitment to State and Federal Programs in the	. 77
ISSUE: Assistance to Channel Maintenance and Beach ISSUE: Energy Facility Siting and Development	73
ISSUE: Energy Facility Siting and Development	73
ISSUE: Tourism, Waterfront Access, and Estuarine Access	74
ISSUE: Types of Density, Location: Units per Acre of	74
STORM HAZARD MITIGATION,	7 6
STORM MITIGATION PLANNING PROCESS	
STORM HAZARD AREA	
VULNERABILITY	
Severity of Risk	
RISK TABLE FOR HAZARD AREAS	77
Magnitude of Risk	77
Estuarine Shoreline.	78
Coastal Wetlands	78
Flood Hazard Areas	
COMPOSITE STORM HAZARD MAP	
COMPOSITE STORM HAZARD MAP	
EVACUABILITY POLICY STATEMENTS: STORM HAZARD MITIGATION	80
POST DISASTER AND RECOVERY PLAN	
PURPOSE:	
ORGANIZATION:	
SUPPORT TEAM:	81
SUPPORT TEAM COMPOSITION AND RESPONSIBILITIES:	
SCHEDULE OF ACTIVITIES	82
LONG TERM RECONSTRUCTION ACTIONS:	
DAMAGE ASSESSMENT	
DAMAGE CLASSIFICATIONS	83
RECONSTRUCTION DEVELOPMENT STANDARDS	
DEVELOPMENT MORATORIA	84
LAND CLASSIFICATION SYSTEM AND MAP:	
Land Classification Map	
Land Classification Districts	
Land Classification Districts	
Developed:	85
Transition:	
Community:	
Rural Service:	
Conservation:	86
7 1 OL 18 41 15	
Land Classification Map	87
THE ATTOMOSPINE PROPERTY A COLUMN POLICE	
RELATIONSHIP BETWEEN LOCAL POLICIES	
AND LAND CLASSIFICATION	88
THE COMPANY THE COORDINATION	
INTER-GOVERNMENTAL COORDINATION	. 88

1986 Perquimans County Land Use Plan Update

APPENDIX	1:	SAMPLE	QUESTIONNAIRE &	SURVEY S	SUMMARY		9
APPENDIX	2:	MAP OF	ARCHAEOLOGICAL	SENSITIVE	E AREAS	9	3

ESTABLISHMENT OF INFORMATION BASE

This 1986 PERQUIMANS County Land Use Plan Update relies heavily on the previous land use planning documents prepared in cooperation with the N. C. Division of Coastal Management. The 1976 PERQUIMANS County Land Use Plan, the initial Perquimans County CAMA Land Use Document, provides a basis for measuring changes in most of the base studies. This plan provided a great amount of base study information concerning the population, economy, and physical land use constraints. The 1980 CAMA Land Development Plan Update for PERQUIMANS County; presented the County's first attempt to articulate local policies concerning specific land use issues. This document proved valuable in helping to focus the planning process toward policy development.

Base information data was taken from a variety of State, Federal, and Local sources. Specific quantitative data concerning land use and development changes were obtained from records maintained by local county officials; particularly the records from the Perquimans County Tax Supervisor's office and the office of the Perquimans County Building Inspector.

Interviews were conducted with the Perquimans County Manager, the County Building Inspector, the County Water System Supervisor, the Superintendent of Schools, and various public officials. The County Manager was particularly useful in supplying information to fill the gaps in local records.

Regularly scheduled monthly meetings were held with the Perquimans County Planning Board. Meetings were advertised in the local newspaper in an effort to solicit citizen participation. A questionnaire was prepared and distributed through the school system, at nutrition sites for the elderly, and at community stores at the various crossroads communities in the county.

PREVIOUS POLICY ACHIEVEMENTS: PERQUIMANS COUNTY

DEVELOPMENT ISSUES

Issue: Pollution of the Perquimans Albemarle System

1981 Policy Statement:

"Perquimans County realizes the potential resource value of the Perquimans River and the Albemarle Sound. It shall be the policy of Perquimans County to cooperate, as it has done in the past, with state and federal agencies and with other units of local government in trying to identify and solve the pollution of this valuable water system.."

Achievements:

In a move toward reducing the impact of development on water quality in the Perquimans River and the Albemarle System, the Perquimans County intend to upgrade their development Ordinances to impose greater development standards. The County has adopted a Flood Plain Development Ordinance to better control development occurring in the flood plain.

Issue: Four-laning US 17

1981 Policy Statement:

"Perquimans County encourages the State to consider four-laning of US 17 through Perquimans County. The County will cooperate with all units of local government in the county in developing plans the future development s which will take place at at interchanges when the locations of these interchanges are determined by the State."

Achievements:

The County, along with other local governments in the region, have appointed residents to various committees to lobby the vigorously for four-laning of this highway. These efforts are ongoing and continuous on the part of the County and other local governments in the region.

Issue: Second Home Development

1981 Policy Statement:

"Perquimans County encourages all types of new development within the county, as long as they meet all the criteria set forth in the official subdivision regulations. However, the County does encourage cluster development of second home and other residential development in areas determined by the District Health Department and the local Soil Conservation Service to be suitable for such developments. Local developers are encouraged to consult these two local agencies prior to submitting subdivision plats to the planning board."

Achievements:

The County continues to administer its subdivision regulations. The District Health must review all subdivision plats and approve lot sizes and drainage plans before a preliminary plat approval can be granted.

Issue: Loss of Productive Agricultural Lands to Urbanization

1981 Policy Statement:

None.

Achievements:

None.

Issue: Commercial Forest Lands

1981 Policy Statement:

"Perquimans County encourages commercial forest companies and private forest land owners to use the most modern timber management practices. It also encourages the development of new industries within Perquimans which can utilize the local timber harvested in the production of salable goods."

Achievements:

None.

Issue: Commercial and Recreational Fishing

1981 Policy Statement:

"Because of the natural resources (fish) located in the rivers, streams and sound near Perquimans County, the county encourages commercial and recreational fishing in these waters and will cooperate with other local governments, state and federal agencies to control pollution in these waters to a condition that commercial and recreational fishing will increase. The County also encourages the location of a commercial fish operation with in the county in order to derive more value from fishing activities than it has in the past."

Achievements:

The County has received state financial assistance for the construction of 2 artificial fishing reefs in the Albemarle Sound.

Issue: _ Off-Road Vehicles =

1981 Policy Statement:

None.

Achievements:

None.

Issue: Types of Development to be Encouraged and Capacity of the County Wide systems to Service New Development

1981 Policy Statement:

"It shall be the policy of Perquimans County to encourage new development on lands considered suitable by the local Health Department and the Soil Conservation Service. All future developments will conform to the county's subdivision regulations and any other land use regulations in force at that time. Scattered site, second home

developments will be permitted except on lands which have severe limitations for septic tank operations or in areas designated as 'fragile' or 'conservation' on the land classification map.

Achievements:

Perquimans County has established an Economic Development Agency and has identified a selection of available sites of varying sizes suitable for development and served by existing water lines.

Issue: Types and Locations of Industries Desired

1981 Policy Statement:

It shall be the policy of Perquimans County to actively solicit the location of small, 'dry' industries into Perquimans County. These industries will be encouraged to locate near existing population concentrations or along major transportation routes. New industries should provide employment which matches the skill levels and employment needs of the residents of Perquimans County.

Achievements:

None.

Issue: Redevelopment of Developed Areas

1981 Policy Statement:

"The County shall, upon publication of the results of the 1980 Census of Housing, have a county-wide housing study prepared. Based on the results of that study, the county will seek assistance of state and federal agencies to best determine the course of action most appropriate to mitigate concentrations of poor housing conditions in the county. The County shall also encourage the towns of Hertford and Winfall to identify such areas within their jurisdictions and seek similar counsel from state and federal agencies to determine appropriate actions to correct those conditions."

Achievements:

Both Winfall and Hertford have completed Community Revitalization projects funded through NRCD since the previous land use plan was published.

Issue: Commitment to State and Federal Programs

1981 Policy Statement:

"It shall be the policy of Perquimans County to cooperate with state and federal agencies in the assessment of proposed projects sponsored by such agencies which will impact directly on Perquimans County. Through the A-95 review process the County will prepared appropriate

comments about any proposed projects, stating their consistency with locally adopted policies or plans.

Achievements:

Compliance with many federal and state programs are mandatory and therefore the County must comply. The County will cooperate and shall remain committed to federal and state programs that, in the opinion of the County Commissioners, will have no adverse effect on county residents or county resources.

PRESENT CONDITIONS

SUMMARY OF PRESENT CONDITIONS

Perquimans County essentially has been at a stand still since the turn of the century. County population numbered 10,091 in 1900 and is expected to reach 10,307 by 1990. The traditional rural agricultural based economy seems unable to sustain a population of greater than 10,000 to 12,000 persons.

The only component of the county's population that has shown consistent growth since 1960 in the elderly age cohort (persons over 65 years of age). The school-age cohort has been in sustained decline since 1970 and is projected to decline even further through 1985 and 1990. This decline diminishes the size of future family-forming age groups and reflects the modern trend toward smaller families and young couples delaying family formation to a later period in life.

While the family-forming age group showed a significant increase from 1970 to 1980 projections for 1990 indicate a future decline. The growth of the family-forming segment in the late 1970's and early 1980's was probably due to a more promising outlook for a farm economy, as prices for farm commodities vastly improved. Persons who would have been forced to move to find employment were encouraged by the improved farm economy to stay and pursue farming as a career. The outlook for farming has dimmed somewhat since the late 1970's and population projections reflect this outlook.

Agricultural employment has declined from 590 persons in 1970 to only 290 persons in 1983. Farm income accounted for over 20% of the county's total income in 1978 but for less than 16% in 1983.

Non-farm business growth in the county was even less encouraging than agriculture. Non-farm proprietors income in the county, when measured in constant 1967 dollars, actually diminished between 1967 and 1983. Total retail sales in Perquimans County from 1979 to 1984 actually declined.

Employment within the county grew by only 100 new jobs between 1970 and 1983. More than half of the employed persons living in Perquimans County commute outside the county for work.

While population and economic growth have been at a stand still, the county has not been totally shielded from the land use problems associated with residential growth. The abundance of shoreline in the county, along with relatively inexpensive cost of land and development, have made Perquimans County a popular retirement area. Between 1970 and 1980 the number of new housing units in the county increased more than did the population with mobile homes accounting for more than 17% of all additional housing units. Seasonal Homes during the period increased more than 372%, from just 76 in 1970 to 359 by 1980.

During the last decade the two townships with the greatest amount of shoreline (Bethel and New Hope) accounted for 92% of the county's population growth.

During the five-year planning period the county intends to take greater control of development. The Perquimans County Planning Board have recently developed a Mobile Home Park Ordinance that has been adopted by the Perquimans County Board of Commissioners and is in the process of revising the county's subdivision regulations. The county is becoming more willing to shift the cost burden associated with development growth away from the public and to the subdivision developments.

POPULATION

From 1900 to 1920, the population of Perquimans County grew by 1,046 persons, reaching its greatest population level of the twentieth century at 11,137 persons. From that zenith until sometime during the 1970 decade, the county's population declined steadily, reaching its lowest recorded level of the century in 1970 with just 8,351 persons, a 25% decline since 1920.

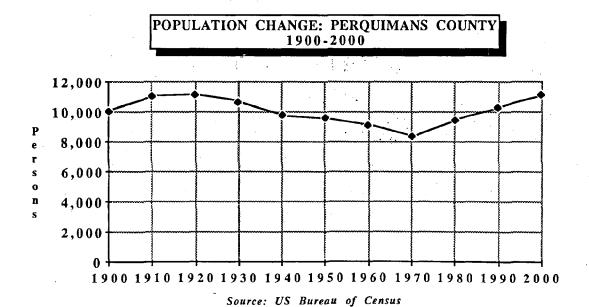
POPULATION CHANGE PERQUIMANS COUNTY

1900-2000

YEAR	POPULATION	CHANGE	PERCENT
1900	10,091		
1910	11,054	963	9.54%
1920	11,137	8 3	0.75%
1930	10,668	-469	-4.21%
1940	9,773	-895	-8.39%
1950	9,602	-171	-1.75%
1960	9,178	-424	-4.42%
1970	8,351	-827	-9.01%
1980	9,486	1,135	13.59%
1990	10,307	821	8.65%
2000_	11,125	818	7.94%

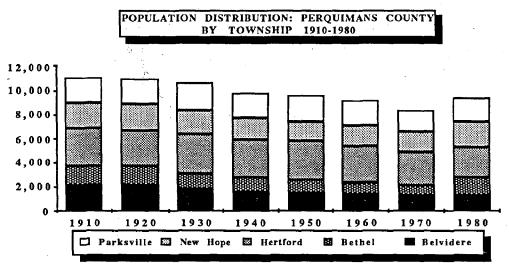
This fifty-year period of decline included several earth-shaking events, such as the Great Depression, World War II, the Korean War, and the post-war period of industrial expansion that somehow managed to by-pass Perquimans County and many other rural communities, while major urban centers swelled with transplanted rural residents. In 1970, things turned around. The dramatic improvement of prices of farm commodities beginning around the middle of the decade kept residents at home and lured many to return to Perquimans County. Between 1970 and 1980, the county grew by 1,135 persons or 13.6%, the greatest 10-year growth period of the century, reaching 9,486.

Population estimates and projections prepared by the N.C. Department of Budget and Management indicate a period of moderate but sustained population growth for the remainder of this decade and into the next century.



The graph above demonstrates Perquimans County's fluctuating growth pattern during the first 80 years of this century and the growth projected for the county into the next century.

GEOGRAPHIC DISTRIBUTION



Source: US Bureau of Census

Thus far during this century, the three townships with the greatest amount of estuarine shoreline have increased their proportional share of the county's population. Belvidere Township, which comprises the northern third of the county and which has no estuarine shoreline, had the greatest proportional loss. In 1910, Belvidere accounted for 19.3% of the county's population; by 1980, its share was only 13.7%. Hertford Township, which includes the town of Hertford, also suffered a decline in its proportional share of the county's population. Hertford contains a small portion of the estuarine shoreline, but this waterfront is has been fully developed since the turn of the century.

POPULATION DISTRIBUTION: PERQUIMANS COUNTY
BY TOWNSHIP 1910 TO 1980

County	Belvidere	Bethel	Hertford	New Hope	Parksville
					
1910 11,054		1530	3194	2147	2049 2128
1930 10,668	1	1307	3202	1965	2400
1940 9,773		1148	3096	1847	2035
1950 9,602	ľ	1102	3206	1569	2242
1960 9,178	1	898	3111	1720	2047
1970 8,351 1980 9,486		851 1515	2763 2508	1636 2026	1836 2064

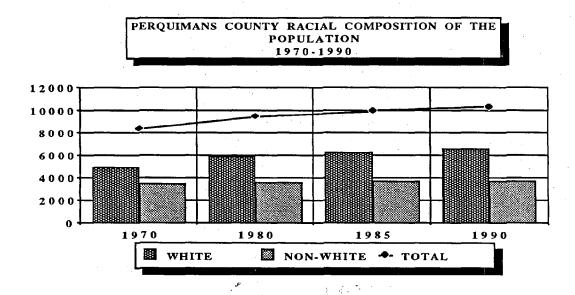
Regardless of the population shift, only Parkville Township, which includes Winfall, contained more people in 1980 than it did in 1910.

POPULATION COMPOSITION

As is shown in the sections that follow, there are some significant and noticeable trends developing in the composition of Perquimans County's population. The racial composition is becoming less homogeneous. The number of residents who are 60 years of age or greater continues to increase and to account for a greater share of the population. The number of school age residents is in sustained decline. The percentage of females participating in the labor force is declining, thus running counter to the national trend of greater female participation.

The sections that follow present information on the following specific components of the county's population: Racial composition, Age group distributions, Labor force composition, Sex distribution, and household composition.

RACIAL COMPOSITION



The non-white population is declining in its proportion of the population even though it is increasing in absolute numbers. In 1970, nonwhite residents accounted for 41.5% of the county population and numbered 3,469 persons; by 1980, the number of non-white residents had diminished to slightly less than 38% of the county population and numbered 3581 persons. Projections provided by the N.C. Department of Budget and Management indicate that this trend will continue at least through the five-year period covered by this document. The 1990 projections estimate that 3,679 non-whites will reside in Perquimans County and will account for slightly more than 35% of the county population.

PERQUIMANS COUNTY RACIAL COMPOSITION OF THE POPULATION 1970 TO 1990

						% of Total		
WHITE	4882	58.46%	5,888	62.07%	6,293	62.98%	6,628	64.31%
NON-WHITE	3469	41.54%	3,598	37.93%	3,699	37.02%	3,679	35.69%
TOTAL	8351	100.00%	9,486	100.00%	9,992	100.00%	10,307	100.00%

AGE GROUPS

The following sections discuss those age segments of the population that generally require special or more frequent types of services both from the private and from the governmental sectors and that in their own way create certain types of development and service demands.

The age groups discussed here are as follows:

•The School Age (5-19 year old sector)

This group naturally creates the demand for educational and recreational facilities and services.

•The Family Forming Group (15-35 year old sector)

This group is generally responsible for new household formations and new offspring. Thus creating demands for new housing facilities and forming the base for future internal population growth.

•The Potential Labor Force (16 years and older)

This group is usually responsible for all the goods and services produced in an area: however, not everyone in this group participates in the work force.

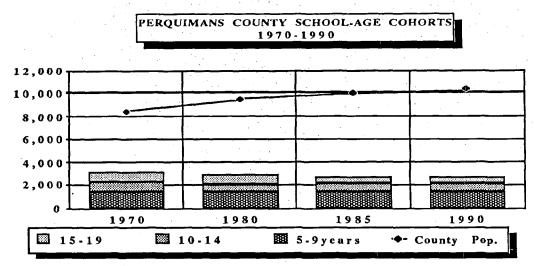
•The Elderly (65 years or older)

This group spans the greatest number of years and could be segmented further into additional age groups ranging from aged to infirm, with each having very specialized and critical needs.

•The Dependency Sector (under 16 and over 65)

This group, only generally, measures those persons who are considered dependent on someone else for the major portion of their personal needs and economic support. There are, of course, persons under 16 years of age and over 65 that are self-sufficient; however, they generally are not numerous, and there are many persons not in these age groups that are, in some ways dependent on outside support.

SCHOOL AGE



Source: NC Office of Budget & Management

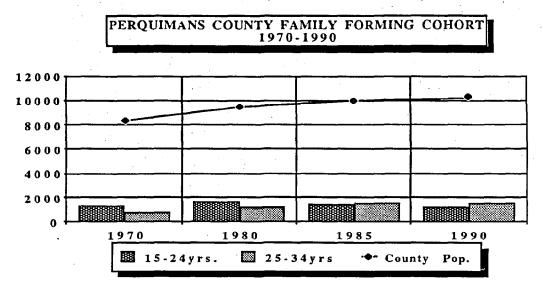
1980, the number of school age children had

Projections indicate a continued decline in the declined to 2,921 persons and is estimated to be school-age population cohorts (5 to 19 years old) during the planning period. The persons number of persons within the age group and the in this age group numbered 3,218 in 1970; by groups percentage share of the total population.

PERQUIMANS COUNTY SCHOOL AGE COHORTS: 1970-1990

		%Of		%Of	7	%Of		%Of
COHORT	1970	COUNTY	1980	COUNTY	1985	COUNTY	1990	COUNTY
5-9 years	1,369	16.39%	1334	14.06%	1464	14.65%	1339	12.99%
10-14	974	11.66%	727	7.66%	675	6.76%	767	7.44%
15-19	875	10.48%	860	9.07%	643	6.44%	679	6.59%
TOTAL	3,218	38.53%	2921	30.79%	2782	27.84%	2785	27.02%
County Pop.	8351		9486		9992		10307	

FAMILY-FORMING AGE GROUP



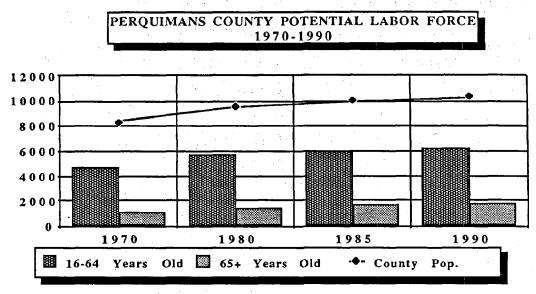
Source: NC Office of Budget & Management

This cohort showed positive and substantial growth during the 1970 to 1980 decade. Present population estimates and projections indicate only modest growth since 1980 and a projected decline by 1990. Substantial growth was recorded among the 15-24 year-old cohort during the 1970 decade. The sustained decline of the school-age cohorts from 1970 through 1980 shows up in the steep decline of the estimates and projections of the younger age segment of the family forming cohorts for 1985 and 1990.

			-		
PERQUIMANS	COUNTY	FAMILY	FORMING	-COHORTS	1970-1990

		%Of		%Of		%Of		%Of
COHORT	1970	COUNTY	1980	COUNTY	1985	COUNTY	1990	COUNTY
15-24yrs.	1299	15.56%	1647	17.36%	1362	13.63%	1238	12.01%
25-34yrs -	794	9.51%	1218	12.84%	1554	15.55%	1585	15.38%
Total	2,093	25.06%	2,865	30.20%	2,916	29.18%	2,823	27.39%
County Pop.	8351		9486		9992		10307	

POTENTIAL LABOR FORCE



Source: NC Office of Budget & Management

The potential labor force generally includes all persons over 16 years of age. Of course, not all of these persons actually participate in the work force. Many are enrolled in school; many are over 65 years of age and are retired; many are physically unable due to handicaps or poor health; and many, particularly in agricultural areas such as Perquimans County, are females who work on the farm or in the home but are not counted as participating in labor the force.

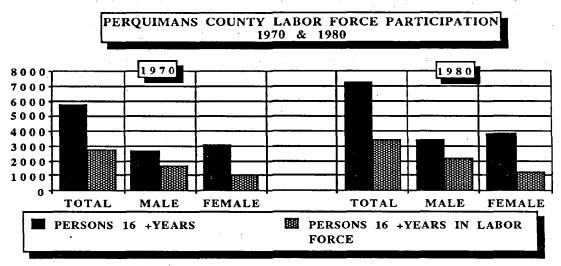
The potential labor force in Perquimans County grew at a much faster rate during the past census decade than did the population as a whole; the population increased by only 13.6% while the potential labor force increased by more than 23%. The 16 years or older group accounted for 69.2% of the 1970 population of Perquimans County and numbered 5,782 persons. By 1980, this group accounted for 75.4% of the county's population and numbered 7,159 persons. By 1990, the potential labor force is projected to increase to 8059 persons and account for 78.2% of the population.

The 65 years and older age segment of this cohort accounted for 19.7% of the labor force in 1980 and is expected to account for 22.5% of the Perquimans County labor force by 1990.

PERQUIMANS COUNTY POTENTIAL LABOR FORCE: 1970-1990

• .		%Of		%Of		%Of		%Of
COHORT	1970	COUNTY	1980	COUNTY	1985	COUNTY	1990	COUNTY
16-64 Years Old	4683	56.08%	5750	60.62%	6054	60.59%	6248	60.62%
65+ Years Old	1099	13.16%	1409	14.85%	1665	16.66%	1811	17.57%
Total	5782	69.24%	7159	75.47%	7719	77.25%	8059	78.19%
County Pop.	8351		9486		9992		10307	

LABOR PARTICIPATION



Source: US Bureau of Census

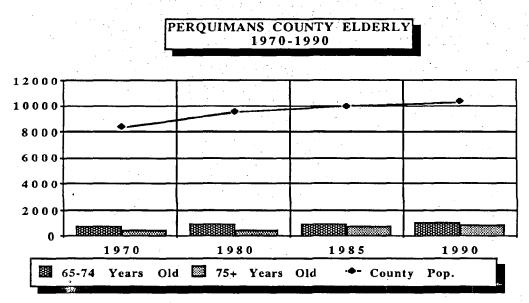
Labor force participation did not, however, keep up with the growth of the potential labor force The number of persons actually working or seeking employment and living in Perquimans County increased by 658 persons or slightly more than 23.6%. The reason for the relative lack of growth among labor force participants is the growing number of elderly and retired persons in the potential labor force. As has been previously noted this age segment is expected to account for 22.5% of the labor force by 1990. Labor participation among male residents decreased from 64.5% in 1970 to 62.9% in 1980. Labor participation among females also declined from 34.15% in 1970 to 33.49% in 1980. The number of females in the labor force actually increased from 1,042 persons in 1970 to 1,288 persons in 1980, a increase of 246 persons or almost 24%.

PERQUIMANS COUNTY LABOR FORCE PARTICIPATION: 1970-1990

	TOTAL	1970 MALE	FEMALE	TOTAL	. 1980 MALE	FEMALE
PERSONS 16 YEAR	ts					
OR OLDE	R 5744	2693	3051	7259	3414	3845
PERSONS 16 YEAR OR OLDER IN TH		•				· .
LABOR FORC	E 2779	1737	1042	3437	2149	1288
LABOR PARTICIPATION						
RAT	E 48.38%	64.50%	34.15%	47.35%	62.95%	33.50%

The reduction in female participation in the Perquimans county labor force counters the national trend toward more females and a greater proportion of women working outside of the home. Here again, the increasing number of elderly persons in the county, the greater share who are women, is affecting the labor force.

ELDERLY



Source: NC Office of Budget & Management

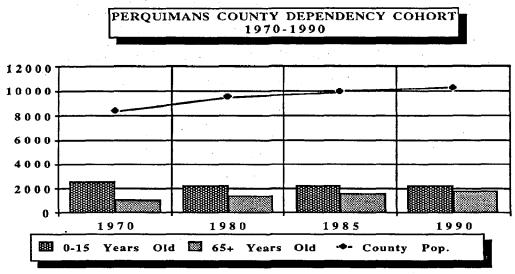
The elderly age group is the fastest growing segment of the Perquimans County's population. In 1960, this group accounted for only 10% of the county's population. By 1980, this group comprised

14.8% of the county population and is projected to in crease to 17.5% of the population by 1990, with the greatest growth occurring in the over-75-years-old segment.

PERQUIMANS COUNTY ELDERLY: 1970-1990

	*	%Of		%Of		∵%Of		%Of
COHORT	1970	COUNTY	1980	COUNTY	1985	COUNTY	1990	COUNTY
65-74 Years Old	688	8.24%	966	10.18%	995	9.96%	1057	10.26%
75+ Years Old	411	4.92%	443	4.67%	670	6.71%	754	7.32%
Total	1099	13.16%	1409	14.85%	1665	16.66%	1811	17.57%
County Pop.	8351		9486		9992		10307	

DEPENDENCY GROUP



Source: NC Office of Budget & Management

The dependency group is the population sector that typically derive a major portion of their economic support from sources other than direct participation in the labor force. For the most part, this group includes dependent children under 16 years of age and persons over 65 years who are retired and draw a major portion of their income from governmental transfer payments, such as Social Security, and from pension programs. The dependency ratio is the ratio of persons not in these age ranges to those that are.

Theoretically, the lower the dependency the more self-sufficient is the area. This measurement provides a general indication of the number of additional persons that must be supported by the overall economy. This measurement, however, usually under counts the number of persons who may be in need of financial assistance or social services since it is based strictly on ages of individuals and not on specific economic or social conditions.

As the table indicates, the number of persons in the dependent age category has increased since 1970.

PERQUIMANS COUNTY DEPENDENCY COHORT: 1970-1990

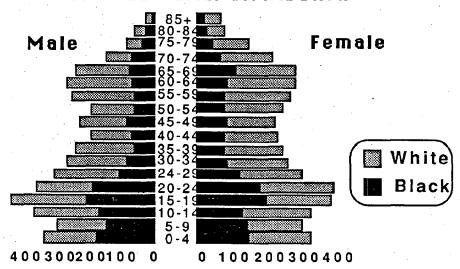
•		%Of		%Of		%Of		%Of
COHORT	1970	COUNTY	1980	COUNTY	1985	COUNTY	1990	COUNTY
0-15 Years Old	2542	30.44%	2226	23.47%	2274	22.76%	2248	21.81%
65+ Years Old	1099	13.16%	1409	14.85%	1665	16.66%	1811	_17.57%
Total	3641	43.60%	3635	38.32%	3939	39.42%	4059	39.38%
County Pop.	8351		9486		9992		10307	

SEX DISTRIBUTION

The ratio of men to women in Perquimans County is approximately one male to 1.09 females, a percentage population split of 47.8% males and 52.2% females. Population projections from the N.C. department of Budget and Management indicate approximately the same distribution by 1990, with males accounting for 47.79% of the population and females for 52.21. The population pyramids below present an overall view of the Perquimans County population as it was distributed by race, sex, and age in 1980 and as it is projected to be distributed in 1990.

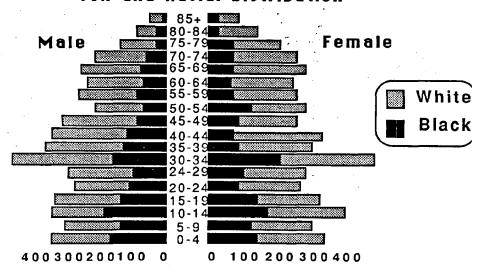
Perquimans County Population Composition: 1980

Sex and Racial Distribution



Perquimans County Population Composition: 1990

Sex and Racial Distribution



PERQUIMANS COUNTY: ECONOMY

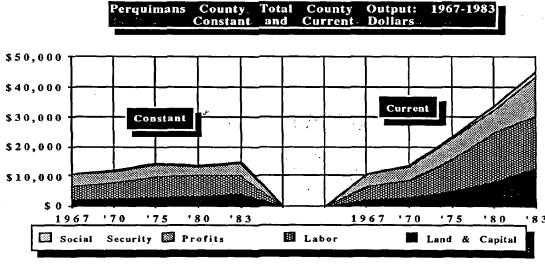
The following section analyzes the Perquimans County economy in terms of total county output, total personal income, employment, and entrepreneurship.

Total county output is the measurement, in dollars, of the total earnings produced in Perquimans County and does not include earnings of county residents working outside of the county or payments received by county residents through government transfer payments such as Social Security. The output measurement, however, does include social insurance contributions made by persons working in Perquimans County and interest, rent, and dividends received by county residents.

The total personal income measure represents all of the income received by residents of Perquimans County. This measurement includes earnings received by county residents working outside the county and adjustments to earnings of persons working in Perquimans County but residing outside of the county. Government transfer payments received by residents of the county are counted in the income total, but social security contributions are not.

<u>Employment</u> measurements include labor force growth participation and composition, employment distribution by industry and job classification, the commuting work force, and job growth within the county.

<u>Entrepreneurship</u> is simply the measure of growth in local business activity. This includes the growth in sales in the county, the increase or decrease in business establishments, and new job creation and payroll growth in the local business sector.



Source: Bureau of Economic Analysis

Output Measured in \$1,000

TOTAL COUNTY OUTPUT

Output of a given area is the sum of all dollars paid to the four factors of production: labor, land, capital, and profits.

Labor, land, and capital are consumption factors; and profits are the residual or value added through local entrepreneurial activities. The following sections discuss these four factors and present historic data concerning their growth and the shift in the proportion each contributes to the county's overall production. The data used in these sections were compiled by the Bureau of Economic Analysis, U.S. Department of Commerce, and are available on an annual basis from 1965 to 1983 and at three-year intervals prior to 1965. For the purposes of this study, data for the years 1959, 1967, 1970, 1975, 1980, 1983 will be used. These years roughly approximate five-year intervals for trend identification and include Census years for cross references (1970 & 1980), the latest year for available information(1983), and the earliest year for which Consumer Price Index information is

Labor + land + capitol + profits = total county output

This analysis looks at output data from two perspectives: Total County Output as expressed in current dollars and Total County Output expressed in constant 1967 dollars. Constant-dollar measurements describe the value of the total county output in what economist call real terms, as current dollars are adjusted to the purchasing power of dollars in some preceding index year, in this case 1967 dollars. The Consumer Price Index information used to adjust this data was provided by the N.C. Department of Budget and Management.

The preceding graph and the following table above present side-by-side comparisons of the change in Perquimans County's total county output from 1967 to 1983 as expressed in current and 1967 dollars. As can be seen, there are some striking differences. The double digit inflation rate in recent years has taken its toll in the purchasing power of the dollar.

PERQUIMANS COUNTY:TOTAL COUNTY OUTPUT(CONSTANT DOLLARS)

	1967	1970	1975	1980	1983
Land & Capital	\$1,765	\$2,456	\$3,017	\$3,322	\$4,389
Labor	\$5,077	\$5,280	\$6,737	\$6,803	\$5,820
Profits	\$3,985	\$3,807	\$4,377	\$3,138	\$4,565
Social Security	\$278	\$320	\$496	\$514	\$486
Total County Output	\$11,105	\$11,863	\$14,627	\$13,777	\$15,260

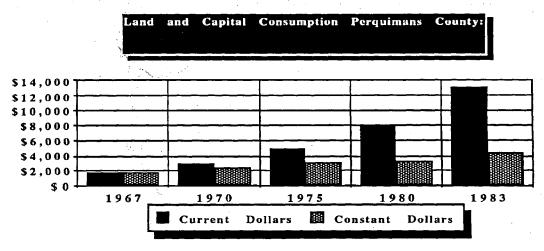
PERQUIMANS COUNTY:TOTAL COUNTY OUTPUT(CURRENT DOLLARS)

1967	1970	1975	1980	1983
\$1,765	\$2,857	\$4,868	\$8,197	\$13,090
\$5,077	\$6,142	\$10,870	\$16,786	\$17,358
\$3,985	\$4,429	\$7,062	\$7,743	\$13,615
\$278	\$372	\$800	\$1,268	\$1,449
\$11,105	\$13,800	\$23,601	\$33,995	\$45,512
	\$1,765 \$5,077 \$3,985 \$278	\$1,765 \$2,857 \$5,077 \$6,142 \$3,985 \$4,429 \$278 \$372	\$1,765 \$2,857 \$4,868 \$5,077 \$6,142 \$10,870 \$3,985 \$4,429 \$7,062 \$278 \$372 \$800	\$1,765

Output Measured in \$1,000

available(1967).

The most obvious and notable trends indicated by the data are the greater dependence of the county's output on the land and capital factor and the fluctuation of the profit sector compared to the other sectors. The labor sector when viewed in real terms, has increased until 1980. From 1980 to 1983 this sector experience a decline.



Measured in \$1,000

<u>Output</u>

LAND AND CAPITAL

The Bureau of Economic Analysis provides data on income received in the county that is derived through rents, dividends, and interest. This data is used here as the estimate of land and capital consumed or generated in production in Perquimans County. There is a separation problem with this data. It is impossible to determine from the data available whether all of the interest, rents, or dividends received as income in the county actually represents the investment of land and capital in the county or investments at some other place. There is also no way to identify the amount of rents and interest used in production in Perquimans County that is supplied by firms and individuals outside of the County.

For the purposes of this study it is assumed that a balancing out takes place. The amount of investment coming in to the county from non-residents is treated as equal to the amount of rents, interest, and dividends earned by county residents through investments outside of the county, thus making the earnings in the county through this factor equal to the amount consumed in the county's output.

This assumption makes the figures expressed highly questionable, and they should not be viewed as absolutely accurate. They are sufficient, however, to identify trends in the overall county economy in terms of growth and of the changes in compositional factors.

PERQUIMANS COUNTY

LAND AND CAPITAL CONSUMPTION: 1967, 1970, 1975, 1980, 1983

Interest, Rents, Divide	1967	1970	1975	1980	1983
Current Dollars	1765	2857	4868	8197	13090
Constant Dollars	1765	2456	3017	3322	4389
Total Output(current \$	\$11,105	\$13,800	\$23,601	\$33,995	\$45,512
Capital as a Percent of					
total output	15.89%	20.70%	20.63%	24.11%	28.76%

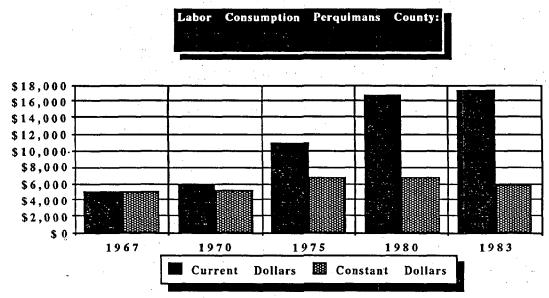
<u>Output</u>

Measured in \$1,000

As can be seen in the following table, land and capital have shown the greatest increase of all the production factors. In 1967, the value of the land and capital used in the Perquimans County output was only \$1,765,000; by 1983, its value had increased by 642% to \$13,090,000 when measured in current dollars. In real terms, the consumption of land and capital increased

somewhat less, but still a substantial 148%, for an average growth rate of 5.8% for each year of the 16-year period from 1967 to 1983.

The growing importance of capital is a world-wide phenomenon and not peculiar to Perquimans County. Production increases are more and more dependent on the expansion of production facilities and improved technology and equipment which increase land and capital requirements.



Output Measured in \$1.000

LABOR

Labor is represented by the total wages and salaries paid to persons working in Perquimans County. This includes wages earned by persons working, but not living in Perquimans County. For the purposes of this study, it is assumed that all wages earned in Perquimans County is from production in the county.

Thus, if a traveling salesman headquartered in Perquimans makes sales to other parts of the country of products produced in still other regions of the country, his wage is still counted as Perquimans County production.

The cost of labor has not been a significant factor in the erosion of the profit factor. In real terms, labor increased by only 8.49% annually between 1967 and 1983. Compositionally labor has not grown significantly and actually decreased from 1980 to 1983: in 1967 labor comprised 45.7% of total county output, and in 1983 it accounted for 38.1%.

PERQUIMANS COUNTY LABOR CONSUMPTION

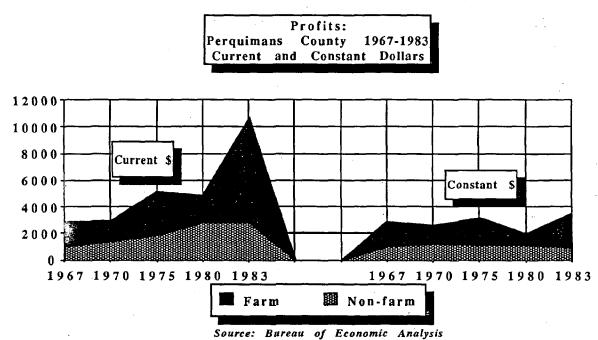
Wages and Salaries	1967	1970	1975	1980	1983
Current Dollars	\$5,077	\$6,141	\$10,868	\$16,788	\$17,358
Constant Dollars	\$5,077	\$5,280	\$6,738	\$6,802	\$5,820
Total Output(current \$	\$11,105	\$13,800	\$23,601	<u>\$33,995</u>	\$45,512
Labor as a Percent of total output	45.72%	44.50%	46.05%	49.38%	38.14%
total output	43.72 70	44.30 70	40.03 70	49.38%	38.14%

Output Measured in \$1,000

PROFITS

The Bureau of Economic Analysis provides data on what is termed proprietor's income. This represents the profits collected by business establishments operating in the county. These profits represents the value added to intermediate products used or traded in local business activities.

The profit sector remained rather stable in Perquimans County during the years from 1967 to 1983. Growth in the profit sector was very slow. In real terms, profits increased by only 14.6% during this 16 year period. This is an annual compounded of only 0.86%.



Output Measured in \$1,000

In current dollars, profits increased for each yearly period being reviewed. In real terms, the 1980 period posted the only decline. This decline is more a reflection of the year 1980, which was selected arbitrarily as a touchstone, than as an indicator of any particular trend. The intervening years between 1975 and 1980 were much more volatile.

In Perquimans County the farm segment of the profit sector has been generally trending upward while the non-farm sector has been declining. This is the reverse of what is occurring in most rural counties. In the five yearly periods under review, non-farm profits have declined consistently, when measured in constant 1967 dollars. When measured in current dollars, the increase in non-farm profits averaged only 6.7% in each of the five periods reviewed. As a comparison, the inflation rate during the period from 1967 to 1983 has increased at an annual rate of 7.1%.

The table below not only presents the same type of information contained in previous tables concerning changes in production factors, but also separates the non-farm and farm segments of this factor. As can be seen in the table, the value added by entrepreneurial efforts has increased only 14.5% in real terms since 1967. Profits have fallen from a high of almost 36% of total output to just 22.8% in 1980.

SOCIAL SECURITY

Social Security has been included as a separate portion of total county output strictly as an accounting measure. The Bureau of Economic Analysis lists social security as a separate item and does not assign it to the particular output sector (land, capital, labor, and profits) that made the contribution. It obviously represents production so has been included in the total output tables.

OUTPUT SUMMARY

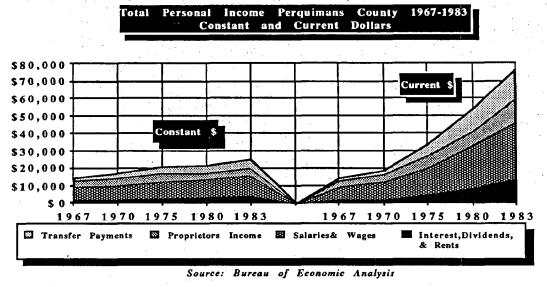
The Perquimans County total county output grew very little during the five yearly segments reviewed in this plan. The trends indicated in these years are not promising. Labor and profits in real terms are almost at a standstill, growing at less than 1% annually. More capital investment is needed to increase county output. Significantly increasing capital expenditures has a synergistic affect on the economy; usually, jobs are created and county wide profits increase. The capital investments are needed most in the non-farm profits sectors. Farming, surprisingly, has shown the only real growth in total county output for Perquimans County.

New investment must occur in the non-farm segment of the county's economy. Agriculture cannot continue to provide the bulk of the county's economic output. Agriculture is an extractive industry as are fishing, forestry, and mining; these industries are extremely volatile and susceptible to international economic trends and technological improvements in production methods and equipment. Farm land represents a finite resource in Perquimans County which cannot be expanded. Increased production in this sector must rely on increased utilization of this resource either through the cultivation of additional lands presently not in cultivation, increased production from existing lands now being farmed, or improved farm prices for farm commodities. Of these options, improved farm prices offers the greatest possibility of improved county output. This is the one option over which the farmers in Perquimans County have no control. The cultivation of marginally productive lands generally does not provide any great economic advantage unless accompanied by improved prices.

It is doubtful that any great technological improvement will occur that will give the Perquimans County farmer an advantage over other farmers in the world. Technological improvements generally provide less productive areas of the world with a better means of competing with the American farmer and generally result in lost jobs in the farming sector, fewer farmers and larger farms, and greater capital requirements. Increased county output will most likely require less reliance on the agriculture sector and the expansion or introduction of less restricted types of industries, such as manufacturing or wholesale and retail trade. Increased development of tourism and commercial activities in the trade sectors offers the best possibility of taking advantage of the abundant water resources in the area.

PERQUIMANS COUNTY: PROFITS (VALUE ADDED)

Proprietors Income	1967	1970	1975_	1980	1983
Current Dollars					
Farm	\$2,908	\$3,042	\$5,175	\$4,899	\$10,761
Non-farm	\$1,077	\$1,387	\$1,886	\$2,847	\$2,851
Total Profits	\$3,985	\$4,429	\$7,061	\$7,746	\$13,612
					
Proprietors Income	1967	1970	1975	1980	1983
Constant Dollars					
Farm	\$2,908	\$2,616	\$3,208	\$1,985	\$3,609
Non-farm A	\$1,077	\$1,192	\$1,169	_\$1,153	\$954
Total Profits	\$3,985	\$3,808	\$4,377	\$3,138	\$4,563
Total Output(current)	\$11,105	\$13,800	\$23,601	\$33,995	\$45,512
Profits as a percent of	-				
Total Output	35.88%	32.09%	29.92%	22.79%	29.91%
Output Measured in \$1,000					



ncome measured in \$1,000

TOTAL PERSONAL INCOME

Total personal income is a measure of all incomes received by residents of Perquimans County, regardless of where it is produced. This data include earnings of residents commuting to work outside of the county and government transfer payments, such as social security or military retirement pensions. These two categories of income are added to the total county output data to provide the total income. Deducted from this total are the earnings of non-resident wage earners working in Perquimans County and social security contributions.

PERQUIMANS COUNTY:TOTAL PERSONAL INCOME(CONSTANT DOLLARS)

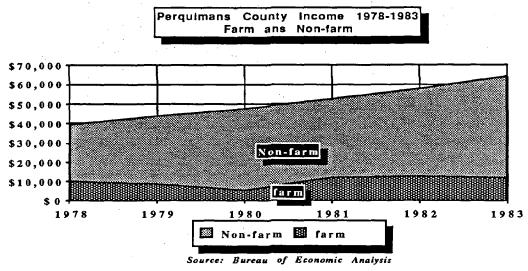
·	1967	1970	1975	1980	1983
Interest, Dividends	04.505	#A 456	A2 015	00.000	# 4 # # #
& Rents	\$1,765	\$2,456	\$3,017	\$3,322	\$4,389
Salaries			-		
& Wages	\$7,142	\$8,151	\$9,343	\$10,293	\$11,136
Proprietors			ş •	** ** *	
Income	\$3,985	\$3,808	\$4,378	\$3,139	\$4,565
Transfer			*	•	
Payments	\$1,932	\$2,374	\$4,181	\$5,125	\$5,669
Total				,	
Personal Income	\$14,824	\$16,789	\$20,919	\$21,879	\$25,759

PERQUIMANS COUNTY:TOTAL PERSONAL INCOME(CURRENT DOLLARS)

	1967	1970	1975	1980	1983
Interest, Dividends					
& Rents	\$1,765	\$2,457	\$4,868	\$8,197	\$13,090
Salaries					
& Wages	\$7,142	\$9,482	\$15,220	\$25,400	\$33,215
Proprietors			•	•	
Income	\$3,985	\$4,429	\$7,061	\$7,746	\$13,615
Transfer					
Payments	\$1,932	\$2,762	\$6,744	\$12,648	\$16,908
Total					
Personal Income	\$14,824	\$19,130	\$33,893	\$53,991	\$76,828

Income measured in \$1,000

FARM INCOME



Income measured in \$1,000

While agriculture is a very important part of Perquimans County, only a small portion of the county's total income is derived from agricultural activities. Since 1978, farm income has fluctuate between 11 and 22 percent of the county's total income.

Farm Income: Per	quimans	County					
	1978	1979	1980	1981	1982	1983	_
Total Income	\$49,196	\$52,952	\$53,991	\$65,008	\$70,906	\$76,825	
Non-farm	\$39,099	\$43,940	\$48,077	\$52,831	\$57,944	\$64,872	
farm	\$10,097	\$9,012	\$5,914	\$12,177	\$12,962	\$11,953	
Farm as % of Total	20.52%	17.02%	10.95%	18.73%	18.28%	15.56%	Income
measured in \$1,000		Sou	rce:Bureau				

Total income from 1978 to 1983 increased by 36%, with the biggest increase from 1980 to 1981 of 20.4%. The small increase in growth of 1% occurred from 1979 to 1980. Average growth per year for this six year period was 7.9%.

Agricultural activity only employs a small portion of the working residents in the county. Of the 2580 Perquimans County residents that were employed in 1983, only 290 were employed in agricultural areas. This is approximately 11% of all employed residence of Perquimans County. This figure has slowly declining over the years.

			and the second of the second o	
A 1 1 A 1	employment	• '	D	
ACTICILITIES .	emninument	מו	Permillmanc	Innity
Agiicuitui ai	campio y ment	4 4 4	i ci que intana	County
0				•

	1970	1975	1980	1983
Total Employed	2,790	3,050	2,920	2,580
Employed in				
Agriculture	590	540	370	290
Agriculture				
as % of Total	21.15%	17.70%	12.67%	11.24%

1984 North Carolina Labor Force Estimates: The Labor Market Information Division of the Employment Security Commission of N. C.

EMPLOYMENT

The largest employers in the county in 1983 were government jobs, retail trade, service jobs, and manufacturing. Of all persons employed in the county, 32.3% were employed in government jobs, 23% were employed in manufacturing activities, 22.8% in retail trade, and 11.8% in the financial, insurance, and real estate fields. This four areas have remained fairly stable over the last ten years with only slight fluctuation.

Employment in Perquimans County

	1970	1975_	1980	1983
Manufacturing	280	430	380	340
Lumber&wood	50	70	5 0	30
Other	230	360	330	310
Non-Manufacturing	980	1,010	1,110	1,020
Construction	30	60	80	30
Trans., Comm., Public Util.	30	40	40	40
Trade	340	340	380	310
Fin.,Insur.,Real Estate	20	50	40	40
Services	140	110	130	160
Government	420	410	440	440
Other		0	0	0
Total	1,260	1,440	1,490	1,360

1984 North Carolina Labor Force Estimates: The Labor Market Information Division of the Employment Security Commission of N. C.

Because of the limited number and limited variety of jobs available in the county, many residents commute to nearby counties or Virginia for work. In 1980, out of 3317 working residents in Perquimans County, 51.7% traveled outside the county to work. Four hundred ninety people commuted to Perquimans County to work; this was 23.1% of all persons employed in Perquimans County.

COMMUTING PATTERNS FOR PERQUIMANS COUNTY 1980

Commuting Patterns for Perquimans County 1980

	Out-Commuters	In-Commuters
	Journey from	Journey to
County/City	Perquimans to:	Perquimans from:
Bertie	· O	1 4
Bladen	3 6	0
Camden	3 1	21
Chowan	374	177
Currituck	2 2	0
Gates	4 1	7 2
Montgomery	7	0
Nash	0	9
Onslow	4	0
Pasquotank	919	181
Tyrrell	6	1 0
Wake	5	0
Washington	3 4	6
Wilson	6	0
9		•
Out of State		
Chesapeake City, Va.	3 0	. 0
Federicksburg City, Va.	11	0 .
Newport News City, Va.	4 1	0
Norfolk City, Va.	6 O	0
Portsmouth City, Va.	5 1	0
Southampton City, Va.	7	0
Suffolk City, Va.	2 1	0
Virginia Beach City, Va.	2 6	. 0
Work Outside US	1 4	• 0
Total Reported Commuters	1746	490
% of Employed Residents	51.7	•
% of Employed in County	,	23.1
	4.004	
Noncommuting Workers	1631	· · · · · · · · · · · · · · · · · · ·
Persons working in County	2121	
Employed Residents	3377	•
Net Commuting	-1258	
Mante where wet nevertible	0.4.0	,
Work place not reported	2 4 9	,

Taken from the North Carolina State Data Center Technical Report, North Carolina Commuting Patterns: 1980 Census of Population and Housing; Research and Planning Services, Office of State Budget and Management, Feb. 1985

SOURCES OF INCOME

While the amount of income made by county residents increased by 56% from 1978 to 1983, only a small portion of this came from employment within the county. Income from employment in the county increased by 10%, while income from employment outside the county almost tripled. Income from interest, dividends, and rent doubled during this period, while transfer payments increased by 85%.

SOURCES OF INCOME FOR PERQUIMANS COUNTY

	1978_	1979	1980	1981	1982	_1983
In-county Labor	\$26,747	\$27,047	\$23,264	\$28,672	\$29,753	\$29,518
Labor Outside County	\$7,124	\$8,262	\$9,882	\$11,781	\$12,968	\$17,309
Int., Div., Rents	\$6,181	\$7,002	\$8,197	\$10,147	\$12,502	\$13,090
Transfer Payments	\$9,144	\$10,641	\$12,648	\$14,408	\$15,683	\$16,908
Total	\$49,196	\$52,952	\$53,991	\$65,008	\$70,906	\$76,825

INCOME MEASURED IN \$1,000

RETAIL SALES

Based on information from the NC Department of Revenue, retail sales in Perquimans County declined by 6% from 1979 to 1984. Perquimans County is the only county in the ten county (Region R) Albemarle Region to post a decline in sales during this period.

Leading the decline was a substantial drop in food sales. Competition from major super market chains with large retail outlets in nearby Elizabeth City along with the poor physical condition of Perquimans County's major outlet probably can be blamed for this substantial decline. Hopefully, this trend will reverse with the recent completion of a new super market outlet in Hertford.

The tables below show the sales distribution in Perquimans County and the comparative change in retail sales in all ten counties in the Albemarle Region.

GROSS RETAIL SALES IN PERQUIMANS COUNTY

1979-1984

	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984
1% Sales Tax	2,642,131	2,656,766	2,925,914	2,375,538	2,057,113
2% Sales Tax	3,588,560	3,098,875	2,757,978	2,800,036	4,901,546
Apparel	260,375	282,498	317,390	324,278	317,067
Automotive	6,369,428	6,573,513	6,358,370	6,729,614	5,613,347
Food	6,262,732	6,672,410	6,131,321	6,850,796	4,833,476
Furniture	888,553	683,648	586,799	773,090	783,343
General Merchand	5,976,461	6,673,713	6,903,217	6,125,661	7,257,670
Building Materials	990,946	792,159	705,295	699,806	624,973
Unclassified	4,473,923	4,503,809	3,568,159	3,329,485	2,925,244
Total	31,453,109	31,937,391	30,254,443	30,008,304	29,313,779

All sales are in total dollars

RETAIL SALES FOR REGION R 1979-1984

				- C C		
COUNTY	1979-1980	1980-1981	1981-1982	1982-1983	1983-1984	
Perquimans	35,927,032	36,441,200	33,822,602	33,337,789	32,239,023	
Camden	9,118,650	10,520,506	10,731,790	10,280,143	10,654,866	
Chowan	58,474,125	60,852,949	65,102,652	70,885,156	75,659,378	
Currituck	44,862,970	46,432,333	50,913,669	52,523,104	57,699,343	
Dare	104,031,983	124,239,702	137,012,469	151,938,595	183,177,141	
Gates	18,281,940	19,787,826	24,459,569	27,268,921	29,405,604	
Hyde	17,410,632	20,052,898	19,920,439	19,704,118	21,304,851	
Pasquotank	158,810,171	176,858,962	185,171,559	204,790,271	236,977,916	
Tyrrell	13,874,928	15,651,508	15,567,745	14,122,494	17,466,808	
Washington	62,629,189	66,258,510	63,802,640	63,135,051	68,078,009	
Region Total	Region Total 523,421,620 577,096,394606,505,134647,985,642 732,662,939					
Perquimans as a percent of Region Total						
	6.86%	6.31%	5.58%	5.14%	4.40%	
Growth Tren	Growth Trends in Retail Sales in Perquimans County					
		1.43%	-7.19%	-1.43%	-3.30%	

Sales measured in total dollars

EXISTING LAND USE

LAND COMPATIBILITY PROBLEMS

Land compatibility problems are generally considered to be two or more land use types which are adjacent to each other and one is somehow restricted from expansion because of adverse condition of the other, thus discouraging additional investment of the restricted land use. From this definition, it can also be assumed that land use compatibility problems are a matter of human perception and a function of human values and judgment. What one person may find to be offensive or an adverse condition, another person may not find offensive or an area of concern.

Perquimans County can be characterized as a rural area. Many of the residents of the area are farmers or have close ties to farming. Thus, people of the area tend to have more independent life styles and are more tolerant of a mixture of land uses. As the county grows and people from other areas move to the county, new values and concerns have begun to develop. While older residents are more tolerant of a mixture of land uses such as animal operations near residential development, other residents may find these harder to tolerate.

Mobile homes and mobile home parks adjacent to conventional dwellings are another area of concern. Objections arise in many cases in subdivisions where property owner's are putting mobile homes on lots that are prohibited for this use by subdivision covenants. The subdivision home owner's association has no real power to enforce these covenants. The only way to stop this situation from occurring is for an adjacent land owner to bring a lawsuit against the property owner. In many cases the adjacent land owner is reluctant to do this. The number of abandoned mobile home, trailers, and campers, as well as, the number that are not properly maintained are also an area of concern.

Many resident have also mentioned the problem of the trash that has accumulated along roadsides. Abandoned cars ,appliances, furniture, and other such items have accumulated in areas along the county roads or around old abandoned homes taking away from the beauty of the area. Many residents feel that this gives visitors a negative impression of the county and its residents.

PROBLEMS FROM UNPLANNED GROWTH

The 1976 CAMA Land Use Plan stated that Perquimans County had no significant land use problems. The plan did point out that problems were beginning to appear in the southern portion of the county along the rivers and sound. Concern in these areas was due to the potential for recreational and second home development in this area of flat wooded land of high water tables, that are prone to flooding. Shoreline erosion, the ability of the soils to support septic tanks, and foundations was another concern, as well as, the protection of the natural beauty of the area.

The 1980 CAMA Land Development Plan sited the concerns of the 1976 Plan and went on to identify other areas of potential concern. These areas while posing no real problem at that time were areas that needed to be addressed as development of the county increased. These concerns are listed below.

- Ground water and surface water contamination from septic tank effluent
- Artificial drainage of woodlands and farms reducing wildlife habitat and adding to surface water contamination

- Strip development along U.S. Hwy. 17 and its interference with through traffic, especially during the peak tourist season
- · Dredging and filling of wetlands

Recently, at a planning board meeting, county residents brought up another area of concern resulting from unplanned growth. This problem has to do with older developments such as Snug Harbor and Holiday Island which were platted before health department regulations. Many of the lots in these subdivisions are much smaller then what health department regulations consider suitable for septic tank use. As these lots begin to be developed the land may not be able to handle the number of septic tank and fields needed for this development, thus some other means of sewerage treatment may have to be considered.

FOREST

The forest lands in Perquimans County are slowly being depleted. In 1967, the North Carolina Forestry Service reported that 61% of the county was in forest. By 1979, a similar Forestry Service document reported that some 52% of the county was forest lands; by 1983, this percentage had shrunk to 48%. Most of the land is being cleared for agricultural use, with much of the clearing taking place in the northern portion of the county near the Great Dismal Swamp.

In a telephone interview, representatives of the Forest Service expressed some concern about the lack of any significant reforestation efforts by county residents. From 1910 to 1970, the volumes of timber removed exceeded the estimates of new volume grown by 50% annually; from 1970 to 1980, removals were still exceeding growth by more than 20% annually. According to the Forestry Service, if this drain continues, there will not be a tree left in a hundred years.

AGRICULTURAL

According to the 1982 Census of Agriculture, 86,376 acres in Perquimans County were being used as farmland. This is an increase from the 1974 figure of 78,454 acres. In 18982, some 75,300 acres of the total farmland were actually harvested croplands. The largest concentration of farmland is in the eastern section of the county. Compared to surrounding counties, Perquimans County produces more soybeans and corn for grain than do surrounding counties and, in turn, produces much less cotton and tobacco. The tables below indicate the number of acres harvested by crop in Perquimans County and surrounding counties in 1983.

	CROPS (ACRES)						
COUNTY	CORN	SOYBEANS	PEANUTS.	TOBACCO	COTTON		
PERQUIMANS	26,800	43,900	2,730		275		
BERTIE	44,800	23,100	21,600	3,320	770		
GATES	20,800	14,900	6,520	135	1,070		
HERTFORD	21,400	14,700	13,400	1,890	1,320		
CHOWAN	13,900	14,600	5,780	325	5,350		

RECREATIONAL ORIENTED COMMUNITIES

Perquimans County, because of its location on the Little and Perquimans Rivers, lends itself to recreational activities. Fishing, boating, hunting, and other activities are very popular. Many people from Virginia and other areas have second homes and weekend cottages in Perquimans County in order to take advantage of these recreational opportunities.

Two major recreational oriented communities are Holiday Island and Snug Harbor. Holiday Island is a private development located between the mouth of the Yeopim Creek and the Perquimans River. Holiday Island has been divided into sections based on land use. These sections are designated as campers and trailers, mobile homes, and conventional homes. While the area started primarily as a second home development, it has increasingly grown in permanent residents over the last few years. Last year this development grew by forty new dwellings. Holiday Island has a well-organized property owners' association and a full-time manager. Holiday Island also has its own fire protection, its own sewer system for the camping section, and it own roads.

Snug Harbor is the older of the two subdivisions and is located on the peninsula formed by the Yeopim River and Yeopim Creek. A mixture of land uses exists here also. While many of the lots are occupied by trailers, campers, and second-home residents, the number of permanent residents are increasing as people are retiring to the area.

NEW RESIDENTIAL DEVELOPMENT

Perquimans County is basically a rural area with low density development. The two incorporated towns in the county, Hertford and Winfall, have the highest concentration of people. Communities such as Bethel, Belvidere, New Hope, and Woodville have clustered residential development. Scattered single-family residential development exists throughout the county, especially along paved secondary roads.

Recreational and second-home developments have occurred along the rivers and streams of the area. This has caused an influx of mobile homes, campers, and weekend cottages. Over the last few years, however, several new subdivisions have developed to meet the demand for permanent homes in the waterfront areas. There are now over twenty-six water front subdivisions. Thirteen of these have been developed in the last five years. There are other subdivisions located throughout the county as well; however, the highest concentration of subdivisions vary in size from a few to several hundred as in Holiday Island and Snug Harbor. While it is hard to tell just how many of these lots have been sold, only a small percentage of them have actually been developed.

Records of building permits before July 1985 are unattainable, thus the actual rate of development of these areas is almost impossible to determine. From July 1985 to December 1985, some 153 building permits were issued. These permits were issued for 21 dwellings, 20 utility permits, 42 home repairs, 9 commercial structures, 44 mobile homes, 1 church, 8 double wides, and 1 institutional structure.

Of the twenty-one new dwellings, approximately five were on scattered sites, fourteen in subdivisions (mainly in Snug Harbor and Holiday Island), and two in existing clustered development. Of the fifty-two mobile homes (including double wides), approximately twenty were in the subdivisions (mainly Snug Harbor and Holiday Island), twelve were in areas of existing clustered development, twelve were on scattered sites, and eight were in trailer parks. Two trailer parks were also issued building permits during this time. These are located along Hwy. 17.

HOUSING

The 1980 Census counted 9,367 persons living in 4,170 housing units in Perquimans County, for an average household size of 2.45 persons per household. During the 1970 to 1980 census decade, population in the county grew by 14% while the number of occupied housing units increased by 31.1%. The greater increase in occupied units than in population indicates smaller household sized and more single-person households accounted for almost 20% of all occupied housing units in Perquimans County in 1980. Such a high number of single-person households usually indicates a sizeable elderly population. Such is the case in Perquimans County, where 14.8% of the county population was over 65 years of age in 1980.

The 1980 Census confirms the tremendous growth of mobile homes in the county during the 1970 to 1980 decade. According to census counts, the number of mobile homes in Perquimans County grew by 354% from 117 mobile homes in 1970 to 531 in 1980.

Seasonal homes also recorded some notable increases during the 1970's. Seasonal homes grew from just 76 units in 1970 to 359 in 1980, a whopping 372% increase.

The chart that follows provides additional information concerning housing in Perquimans County.

HOUSING IN PERQUIMANS CO	IINTV T			
" FERGOIMANS CO	٠٠٠٠ <u>-</u>	1970	. [1980
TOTAL POPULATION		8,351		9,486
TOTAL UNITS	•	2,894		4,170
VACANT SEASONAL		7 6		359
VACANT YEAR AROUND		308		5 2 8
MOBILE HOME OCCUPIED YEAR AROUND		117		5 3 1
LACKING SOME OR ALL PLUMBING FIXTURES		1,015		409
OWNER OCCUPIED		1,749		2,464
WHITE NON-WHITE RENTER OCCUPIED	1,220 529	751	1,767 697	816
WHITE NON-WHITE	417 334	·.	442 374	

COMMERCIAL AND INDUSTRIAL

Commercial and industrial development has been slow in coming to Perquimans County. Over the last few years, however, there has been a noticeable change. A new shopping area has been built on land once farmed along U.S. Hwy.17 in Hertford. A grocery store, drug store, and dollar store have moved into this facility. The drug store is new to the area while the other two stores are extensions of stores that already existed in Hertford. Across from this new shopping center, another shopping area has expanded to include a florist, two clothing stores, and a seafood restaurant. Other commercial development in the last few years includes a bed-and-breakfast establishment, which includes a bakery, and several convenient-type grocery stores which have opened throughout the county. A new medical facility has been built in Winfall and is staffed with a full time doctor.

Two industrial operations exist in the county. These are both clothing manufacturers. Don Juan has been in the county since 1956 and presently employs around three hundred people. Don Juan is located right outside of Hertford and is provided with water and sewer facilities by this town. Apricot is located in Hertford and employes around 87 people. Plans are now being made for a new facility for Apricot. This plant is to be located beside Don Juan. When the building is complete, Apricot expects to increase its payroll to 130 employees.

A cotton gin was built in Winfall within the last three years and has been a big influence on the increased production of cotton in the county.

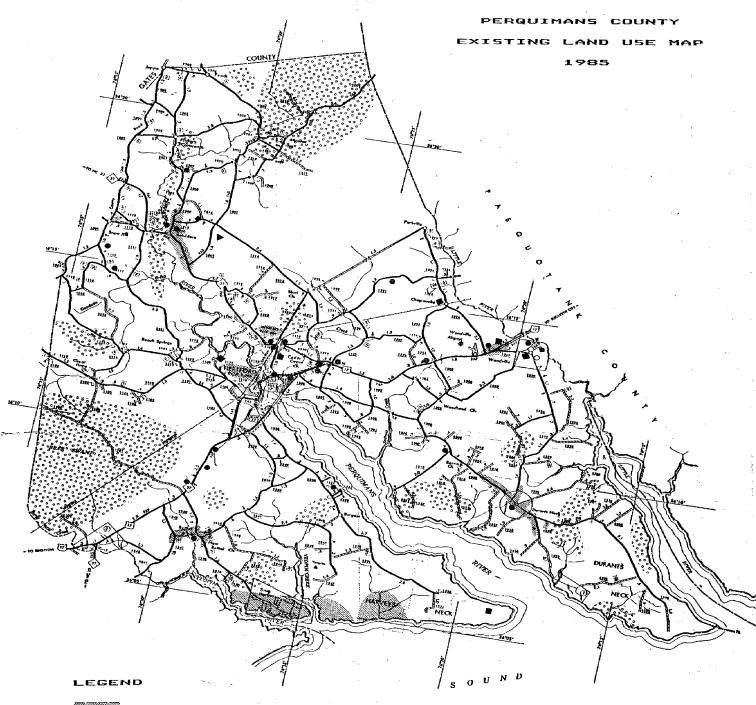
FUTURE LAND USE

Future development in Perquimans County will likely continue in the present patterns. Residential development can be expected to continue in existing communities. With the expansion of the county water system to most areas of the county., more scattered development can be expected.

Development of waterfront subdivisions will likely experience a good deal of growth as well. An area of concern in the older subdivisions is the development of small lots that do not meet health department regulations. As these lots begin to fill, the problem of finding a proper means for sewage disposal will have to be addressed.

Commercial development is likely to continue along Hwy. 17 near the new shopping area≥ The land in the area is farm land well suited for this type of development. Some of the land adjacent to the shopping center has already been purchased for future commercial growth.

Industrial development of the county will be slow and will likely be near Hertford where water and sewage facilities are available.



ZZZZ RESI

RESIDENTIAL

FOREST

AGRICULTURAL

COMMERCIAL

•

INDUSTRIAL

C

TRANSPORTATION, COMMUNICATION, & UTILITIES

GOVERNMENT & INSTITUTIONAL

lack

CULTURAL, ENTERTAINMENT, & RECREATION

1.

CURRENT PLANS, POLICIES, AND REGULATIONS

1968 The Potential for Outdoor Recreation in Perquimans County by the Perquimans County Soil and Water Conservation Committee

This study is designed to provide basic information through which future growth and development can be directed. This survey is based upon the premise that "it makes more sense to direct the growth and development that will shape the county's future in the decades to come than to risk random development of its water and sewer system which may be detrimental to the public welfare." This report gives a general overview of Perquimans County's existing facilities and proposed water and sewer facilities.

1971 The Potential for Outdoor Recreation in Perguimans County by the Perguimans County Soil and Water Conservation Committee

This document evaluates the potential for development of eleven outdoor recreational activities in Perquimans County. Each activity was appraised as having low, medium, or high potential for development. Activities in Perquimans County with high potential for development were small game hunting areas, big game hunting areas, and historical areas. Activities with medium potential were vacation cabins, cottages, and home sites; vacation and fishing; natural areas; vacation farms and ranches. Low potential activities were transit camping grounds, standard and par three golfing, driving ranges and miniature golf., riding stables, and shooting preserves.

1975 <u>Proposed County-Wide Water System Engineering Report</u> by River and Associates, Inc.

This study presents an overview of the county, the existing water system, and future needs. The study also describes the proposed water facility, how these plans are to be carried out, and estimated cost of the project. Design data has also been given.

1976 CAMA Land Development Plan

by the Perquimans County Planning Board

This plan provides an abundance of information concerning the environment of Perquimans County and the extent of development in the county as it existed in 1975. This was the first plan for the county prepared under the Coastal Area Management Act; thus it emphasized potential areas of environmental concern and fragile areas.

1977 Preliminary Engineering Report: County Wide Water System Phase II

This study is similar to the 1975 report in layout and form. It deals with the second phase of the proposed water system for the county.

1978 Subdivision Regulations

The purpose of these regulations is "...to guide the subdivision of land within the limits of Perquimans County in order to promote the public health safety and welfare of the community." The purpose and provision of these regulations are typical of those in North Carolina. However, there are at least two provisions that are unique to Perquimans County. The County Board of

Commissioners felt that these were more suitable and acceptable for the area and its residents. These two provisions are as follows:

- 1) Land given to children by their parents is exempt from subdivision regulations.
- 2) Subdivisions may have private interior streets. These roads do not have to be paved. They do have to meet state codes pertaining to right-of-way width so that once they are complete, they can be taken over by the state.

1978 Housing and Land use Addendum

This study was prepared to provide additional housing and land use analyses which were not required as a part of the CAMA Land Development Plan, but which were required in order to maintain Perquimans County's eligibility to receive Section 701 planning funds from the U.S. Department of Housing and Urban Development. The most notable land use policies, objectives, and implementation methods.

1979 CAMA Land Use Plan Update

This plan provided the first five-year update to the original 1976 CAMA Land Use Plan. This plan provided an updated information base including 1980 Census data and for the first time identified development issues; established county goals, objectives and policies concerning these issues; and developed implementation strategies.

CONSTRAINTS TO DEVELOPMENT LAND SUITABILITY

SOILS

Soils in Perquimans County and most of the coastal region itself impose severe limitations to development. The most frequently occurring limitations are poor drainage, a high water table, frequent flooding, low bearing strength, and poor soil percolation. All of the soils in the county have been classified and rated as to suitability for various types of development and uses by the U. S. Soil Conservation Service. These ratings are based on the severity of the limitations the soil impose. The soils have been grouped, classified, and mapped by soil associations.

Perquimans County consists of seven soil associations. Soil associations are soils occurring together in a characteristic and repeating pattern. An association consists of one or more principal soil and at least one minor soil. These minor soils can be similar or very different from other soils in the association.

The following discussions and charts compile soil descriptions contained in Soil Associations of the Coastal Area Management Region, by the Division of Coastal Management, and in the General Soil Map and Interpretations for Perquimans County. prepared by the Soil Conservation Service, U. S. Department of Agriculture. The seven soil associations found in Perquimans County are described as follows:

1) Conetoe-Wando-Dragston

These soils are well drained to somewhat poorly drained sandy soils that occur as ridges on higher landscapes or as extensive undulating areas of old marine surfaces. Water table depth is less than 6 feet. Septic tank limitation range from minor to severe. These soils make up approximately 2% of Perquimans County.

2) Bladen-Lenoir-Craven

These soils are moderately well to poorly drained. These occur on almost level land or sloping ridges. Water occur on almost level and or sloping ridges. Water table depth is less than one to three feet. Septic tank suitability is poor. These make up approximately 46% of the county.

3) Bladen-Bayboro-Portsmouth

These soils are poorly drained to very poorly drained. These occur on broad flats or depression areas. Water table depth is a foot or less. Septic tank limitations are severe. These soils make up approximately 32% of the county.

4) Bertie-Tomotley-Altavista

These soils are moderately well drained to poorly drained. They occur on broad flats or depression areas or as ridges along streams terraces and old marine surfaces. Water table depth is less than a foot to 2.5 feet. Septic tank limitations re from moderately severe to severe. These soils make up approximately 11% of the county.

5) Wickham-Altavista-Wahee

These soils vary from well drained to moderately well drained to somewhat poorly drained. They occur on high marine surfaces and as narrow ridges along major drainage systems. Water table depth is six inches to 2.5 feet. Septic tank limitations are slightly moderate to severe. These soils make up approximately 2% of the county.

6) Dorovan-Johnson:

These soils are very poorly drained. These occur in low flood plain areas. Water table depth is from 0 to 1.5 feet. Septic tank limitations are severe. These soils make up 5% of the county.

7) Dare-Ponzer-Wasda

These soils are very poorly drained. They occur in meager swamp and pocosins areas. Water table depth is from 0 to 15 feet. These make up approximately 2% of the county.

DRAINAGE

Drainage classifications describe how long it takes water to move through soils. Generally, the darker the soil, the longer the soil retains water and the poorer the drainage rating. Soil color is usually used as the indicator of soil drainage characteristics.

In Soil Associations of the Coastal Area Management Region, the Division of Coastal Management describes these classifications as follows:

Well Drained: Red, yellow, and brown subsoils, often bright, free of mottles generally to a depth of 30".

Moderately well drained: Predominantly brown, not bright, with some grey mottles 34 to 30 inches below the surface.

Poorly Drained: Predominantly gray throughout. The water table usually stands at or very near the surface much of the year.

Very Poorly Drained: These soils have 10 inches or more of a black surface over gray subsoils. Water generally inundates these soils for most of the year.

SEPTIC TANK LIMITATIONS

There is no public sewer system in Perquimans County: and the typically high water table, characteristics of most of the area, makes the design and placement of septic tanks a critical consideration. The definitions below, taken from <u>General Soil Map and Interpretations</u> for <u>Perquimans County</u>, <u>North Carolina</u>, describe the septic tank limitation ratings. The map that follows generally identifies soil areas of the county with these limitations.

Slight Limitations: Such soils "have a percolation rate faster than 45 minutes per inch, a seasonal high water table at a depth of more than 72 inches, slopes of less than 8 percent, hard rock at a depth of more than 72 inches, and are free of flooding."

Moderate Limitations: These soils are moderately favorable. Limitations can be overcome or modified.

Severe Limitations: These soils "have one or more unfavorable characteristics," such as "a percolation rate slower than 60 minute per inch, a seasonal high water table at a depth of less than 48 inches, slopes of more than 15 inches, or are subject to flooding."

FOUNDATION LIMITATIONS

Ratings for foundation limitations refer to several characteristics: the shrink-swell potential; the slope; the soil texture, depth, and permeability; the depth to water table and the potential for flooding.

Again, the Soil Conservation Service's <u>General Soil Map and Interpretations for Perquimans County</u>, <u>North Carolina</u> is useful for definitions of ratings. Soils with foundation limitation ratings of slight "have slopes of less than 8 percent, are well drained or moderately well drained, free of flooding and depth to hard rock is more than 40 inches. They have low shrink-swell potential and are relatively free of stones and other coarse fragments."

Soils with a foundation rating of severe "have one or more than 15 percent; are cobbly or stony; are less than 20 inches to hard rock; are wet (high water table); are subject to flooding or have high shrink-swell potential."

The map that follows indicates soil associations in Perquimans County exhibiting the ratings above.

SOURCES OF WATER SUPPLY

GROUND WATER

Water recharge areas and watershed areas help maintain ground water supplies as well as provide surface water reservoirs to collect water. These areas should be protected so that their functions are not impaired and so that they remain reasonably free of any pollutants. Ground water recharge in the lower aquifer is often slow and inefficient because of the heavy clay soils that usually contain these aquifers. Recharge areas are essential to sustain ample water supplies to meet the needs of new population growth. The following map shows where these areas are in Perquimans County.

Residents of Perquimans County obtain water from three major aquifers. The water table aquifer, the Upper Yorktown aquifer furnishes water for the many shallow private wells still in use in the county. The Upper Yorktown is under artesian pressure and furnishes most of the water for the county water system. Water from this aquifer is generally hard and water drawn from its lower depths often have a high chloride content. The Beaufort formation is the deepest aquifer and is generally not useful because of its high chloride content.

The discussion that follows is largely indebted to Rivers and Associates, Inc., Perquimans County: Comprehensive Water and Sewer Study.

UPPER YORKTOWN AOUIFER

The Upper Yorktown aquifer is under artesian pressure and contains the only large amount of useful artesian water. The Yorktown aquifers are recharged by the downward seepage of water from the water-table aquifer through confining layers. Yorktown formations range in thickness from 125 feet in the northeastern portion of the county to 250 feet in the northwestern section. Wells range in depth from 47 to 122 feet and yield 2 to 40 gallons per minute from wells 1 1/2 to 2 inches in diameter. Water from this aquifer is very hard, with some areas containing as much as 0.06 to 6.6 ppm (parts per million) of iron.

WATER-TABLE AOUIFER

The water-table aquifer ranges in thickness from 65 feet in the northern part of the county to 2 feet in the southwestern portion. Wells are usually shallow and yield from 2 to 10 gallons per minute. This aquifer is recharged mainly by local rainfall. Water from this aquifer is usually less highly mineralized than those from other water-bearing zones. Dissolved mineral constituents range from 123 to 749 parts per million. High levels of dissolved solid may be due to contamination from surface water drainage. The uncontaminated water from this aquifer contains less than 550 ppm except in some areas adjacent to the Albemarle Sound. The county's interior wells yield water containing less than 250 ppm. Water hardness for most inland wells is less than 100 ppm but range from 60 to 365 ppm in other areas. Water from this aquifer ranges in iron content from 1.3 to 4.3 ppm. In general, water from this aquifer is slightly acidic and can be corrosive to metal.

BEAUFORT AOUIFER

Thickness of this aquifer ranges from 290 feet in the southwest to around 500 feet in the northwest. Wells drawing from this aquifer are mostly domestic and range in depth from 290 to 620 feet and yield 3 to 20 gallons per minute. This water is brackish with saline chloride levels from 979 to 1,540 parts per million.

SURFACE WATER

Perquimans County has numerous rivers and streams. Of the 329 square miles of surface area in the county., 77 square miles are covered by water. These water resources are very important to the county and need to be protected.

In order to help protect surface waters, the Water and Air Quality Reporting Act was established in 1971. Stream classifications are used in this program to determine the quality of water in areas of population levels.

The Town of Hertford's sewage treatment plant has been cited for violations of its discharge permit, more specifically for discharging untreated or partially treated effluents into the Perquimans River. This infraction is the result of ground water infiltrating collectors, thus overloading the treatment plant. The severity of this problem increases after heavy rains and high wind tides. This problem has been investigated by the Department of Environmental Management, and grant funds have been allocated by the Environmental Protection Agency's 201 Facility Plan to increase the treatment plant capacity by 1000,000 gallons per day.

AREAS OF ENVIRONMENTAL CONCERN

The coastal Resources Commission has designated four categories of environmental concern in the twenty coastal counties included in the North Carolina Coastal Area Management Act:

- 1) The Ocean Hazard System
- 2) The Estuarine System
- 3) Public Water Supplies
- 4) Natural and Cultural Resource Areas

Only one of these four categories, the Estuarine System, pertains to Perquimans County. The Estuarine System category contains four components designated as areas of environmental concern: Estuarine Shorelines, Public Trust Water, Coastal Wetlands, and Estuarine Waters. All of these components are present in Perquimans County.

1) ESTUARINE WATERS

These waters are defined by CAMA as "all waters of the Atlantic Ocean within the boundary of North Carolina and all all the waters of the bays, sounds, rivers, and tributaries thereto seaward of the dividing lien between coastal fish-agreement adopted by the Wildlife Resource Commission and the Department of Natural Resources and Community Development." These waters are important for the fish and marine life they support and for the means of commercial transportation they allow.

2) PUBLIC TRUST WATERS

These areas are described by CAMA as natural and man-made "bodies of water containing significant public fishing resources" or those to which "the public has acquired rights by prescription, custom, usage, dedication or any other means." These lands can be publicly owned and are used for navigational and recreation purposes. This area is essential to commercial and sport fishing.

3) COASTAL WETLANDS

These areas are subject to regular or occasional flooding by tides. Coastal Wetlands are generally not mapped but are identified by the presence of one or more of ten plant species. The ten identifying plants are shown below.

4) ESTUARINE SHORELINE

Estuarine shorelines are non-ocean shorelines that are "intimately connected to the Estuary." The estuarine shoreline is more specifically defined as a 75' strip of land bordering all waters determined to be estuarine through an agreement between the North Carolina Department of Natural Resources and Community Development and the North Carolina Wildlife Resources Commission.

MANMADE HAZARDS

Man-made hazards in Perquimans County are generally storage facilities for flammable and explosive materials. The locations of a number of these hazards are listed below.

MANMADE HAZARDS IN HERTFORD

- (1) Reed Oil Co. bulk gas storage
- (2) Town of Hertford Water Treatment Plant chlorine storage
- (3) Farmers Feed and Seed pesticides and bulk gas storage
- (4) Hertford Supply Co. pesticides and bulk gas storage
- (5) Pyrofax Gas Bulk Plant LP gas storage
- (6) Woodland Circle Housing limited street accessibility for fire equipment
- (7) Town of Hertford Waste Treatment Plant chlorine storage
- (8) Railroad Tracks
- (9) Hertford Solid Waste Landfill

MANMADE HAZARD AREAS IN PERQUIMANS COUNTY

- (1) Community Gas Co. 1000 plus gallons of LP gas stored in bulk tanks.--NC 37 near Bethel
- (2) Perquimans County Water System Plant Chlorine storage--SR 1339 near New Bethel Church
- (3) Belvidere Farmers Exchange chemical storage in warehouse and LP gas installation for dryers.--SR 118 near Snow Hill
- (4) Albemarle Fertilizer Co. fertilizer materials stored in bulk tanks--SR1001 Near Belvidere
- (5) Intercounty Water Treatment Plant chlorine storage -- US 17 near Woodville
- (6) Housing development in difficult locations to reach for fire protection water must be drafted--Residential area near Durants Neck and along the shore of the Little River
- (7) Perquimans County Water Treatment Plant chlorine storage--Winfall
- (8) Hollowell Oil Co. bulk gas storage--Winfall
- (9) Winslow Oil Co. bulk gas storage--Winfall
- (10) Albemarle (Chemical) Fertilizer Co. gas dryers and storage of chemicals--Hertford
- (11) Winfall Water Treatment Plant chlorine storage Winfall
- (12) Railroad
- (13) Holiday Island Waste Treatment Plant- chlorine storage--Holiday Island
- (14) Perquimans Chowan Landfill -- Near Holiday Island

HISTORICAL SITES

Perquimans County, which was settled before 1670, contains several of the oldest houses in the state. The residents of Perquimans County are very proud of their heritage and the importance of the county in American history. In the survey done for the 1980 CAMA Land Use Update, over 50% of those who responded to the survey felt that it was important to preserve and protect the county's historical sites. In the 1971 publication by the Perquimans County Soil and Water Conservation Committee, The Potential for outdoor recreation, historical areas were rated as having one of the highest potentials for recreational development. These sites should be preserved not only for their historical value but also for their potential economic value as well.

Perquimans County has over eighty historical sites. However, only ten of these are now listed in the National Register of Historical Places. Sixty-six sites are now being studied to determine if they qualify to be added to the Register.

CONSTRAINTS TO DEVELOPMENT: CAPACITY OF PUBLIC FACILITIES

WATER SYSTEM

Perquimans County's water system consists of two treatment plants, six wells (three at each treatment plant), three storage towers capable of holding 200,000 gallons each, and approximately 240 miles of water lines. The water lines are PVC pipes with 2, 4, 6, 10 and 12 inch mains. The Bethel plant has been in operation for eight years. This plant can treat approximately 500 gallons per minute. The three wells at this plant can pump 500 gallons per minute also The Winfall plant is just over a year old and can treat around 350 gallons per minute. The three wells at this plant can pump approximately 425 gallons per minute.

In an average 12-hour day, the Bethel plant can treat approximately 360,000 gallons. The Winfall plant can treat approximately 252,000 gallons a day. This is a combined capacity of 612,000 gallons per day. The average daily consumption in the county system is approximately 357,750 gallons. The water system is now operating at approximately 58% capacity based on a twelve-hour operation period.

Average monthly consumption in 1985 was approximately 11,600.000 gallons. The system currently serves around 2140 customers. The number of gallons treated in 1982 was 82,412.000 and in 1985 this increased to 139,688,000, an increase of 69.5%. Much of this increase was due to the Phase II extension of water lines.

Water consumption peaks during summer months, declines during fall and spring months, and increases again in the colder winter months. On an emergency basis, Perquimans County supplies water to Chowan County. The county does not plan to extend any more water lines. It is now up to the developer to pay for the water lines and then dedicate them back to the county, who assumes the responsibility of maintaining them. Money has been allocated to overhaul the Bethel plant and to replace its outdated equipment, which has been severely damaged by the high iron content of the county's water.

SEWAGE

Two sewage facilities operate in Perquimans County. One is the municipal system of the town of Hertford, and the other is a small package system at Holiday Island. Septic tanks are used throughout the rest of the county. The 1968 Comprehensive Water and Sewer Study stated that because of the flat terrain, high water tables, sandy soil structure, and scattered development of the county, a county-wide sewer system would not be economically feasible. This study recommended that Hertford continue to expand and update its system as the town grows.

The study also encouraged Winfall to consider the installation of a public sewer system if either of the following two conditions come about:

- 1) If the population density throughout the town becomes such that a nuisance or health hazard is generated from septic tank use:" or
- If the total population served by this system would reduce the cost per user within reasonable and economically feasible limits.

The Town of Hertford's sewer system consists of a collection system with 8 inch PVC mains. Nine lift stations are required to move the sewage from the collectors to the treatment plant. The treatment plant is a 3000,000 gpd contact plant that is now working at almost full capacity.

Frequently, water infiltrating the collectors causes the plant to overload and to discharge untreated or partially treated sewage into the Perquimans River. The severity of this problem increases after heavy rains and high tidal winds. This problem is being addressed by EPA 201 funding. This money will be used to increase the capacity of the treatment plant by 100,000 gallons a day.

Holiday Island presently operates a waste treatment package plant to handle the needs of its camping section. This plant is capable of treating 20,000 gallons per day. After being treated at the plant, the effluent is released into a large drainage field through underground drainage lines. At the time of the 1976 CAMA Land Use Plan effluent from this plant as discharged directly into Minzes Creek. A 100,000 gallon storage tank has been added to hold the excess amount of sewage that is produced on weekends until it can be treated during the week.

SOLID WASTE

Perquimans County, Hertford, and Winfall all offer garbage pickup. Perquimans and Chowan Counties jointly operate the Perquimans-Chowan Landfill, which is located in Belvidere Township. This site is approximately five years old and has a life expectancy of six to seven more years.

Hertford and Winfall jointly use a landfill with a life expectancy of about ten years. With Federal regulations on landfills becoming more restrictive, the county may be forced to use a different means of solid waste disposal. Incinerators are now being considered. This system uses one third less land than does the present cell system. Regardless of the type of system to be used, more land will be needed to operate this service.

POLICE

County-wide police protection is provided by the Sheriff's Department. This department is comprised of the sheriff and two full-time and one part-time deputies. The Sheriff's Department is located in the County Courthouse. Excluding residents of Hertford and Winfall, there is one county law enforcement officer for every 2,066 county residents. The sheriff and the Hertford Police Department both operate through a dispatch system. During the day, these two departments are handed separately. At night, however, all calls are handled through the town. Perquimans County does not have a jail and so uses the Tri-County jail in Elizabeth City.

The Hertford Police Department employs five full-time policemen. The department has four cars, all of which need to be replaced in the next ten years. On an average, two cars are replaced every two years. Presently, the department is located in the Municipal Building; however, a new facility is now being built. This should be finished sometime in late 1986.

A Police Department was established in Winfall in 1983. The department employs a chief and one part-time policeman. This department operates out of the Winfall Town Hall. This department also uses the Tri-County jail in Elizabeth City. Winfall is considering discontinuing its police service.

FIRE

County-wide fire protection is provided through six volunteer fire departments which are located throughout the county. These departments are as follows: Bethel, Belvidere-Chapel Hill, Durants Neck, Hertford, Intercounty, and Winfall. The forestry service provides fire protection to the county in the cases of forest and brush fires. Holiday Island has its own fire department, which is two years old. This department consists of a 1979 quick response truck with a 350 gallon pumper. Because of the recent growth rate of Holiday Island, this department will soon need to expand. In major fires this department receives help from other county fire departments.

All six volunteer departments have averaged around 20 to 25 members over the last five years. The average number of calls over the last five years has varied by department from an average of twenty calls per year in the Winfall department to as high as fifty to sixty calls per year. All departments have their own facilities and equipment. Funds to operate these departments are obtained through donations and county funding.

RESCUE SERVICE

The Perquimans County rescue squad provides ambulance and rescue service to the entire county. The rescue squad consists entirely of volunteers. The squad is supported by private donations and county funding. The service is operating in the county. The county owns the squads vehicles and building. A new garage has been added to the present facility so that all four vehicles can be housed. This was completed in early 1986. The present facility is used for training, living quarters, and years. Equipment consists of the following:

- 1983 Ford modular ambulance main unit used for most regular rescue calls
- 1981 Ford van ambulance used mainly for hospital transfers
- 1975 Chevrolet modular ambulance used as a back up unit
- 1973 Chevrolet van used as a back up unit

These units should be adequate to meet the needs of the county within the planning period.

The rescue squad consists of eleven ambulance attendants and thirty-nine EMTs. Fifteen of the EMTs are eligible for retirement in 1987. The squad operates a day shift and a night shift. Weekend and night shifts are well staffed; however, covering the day shift is becoming more difficult as most of the volunteers have other full-time jobs. In order to provide adequate coverage of the day shifts, the possibility of going to paid attendants and EMTs may soon have to be considered.

RECREATIONAL FACILITIES

The Perquimans County Recreation Department is located in Hertford. The department has a full-time director and a small staff. This department is responsible for the operation of the county Senior Citizen Center, which is located in Hertford, and offers the following activities for county residents:

Adult men volleyball Adult basketball Youth Soccer Youth Football Adult women volleyball Thirty and over basketball Girls Softball Baseball

1986 Perquimans County Land Use Plan Update

Women Softball T-Ball Men Softball
Arts and Crafts

A bass tournament is part of the facilities, the Recreation Department maintains two other facilities: Missing Mill Park, located in Hertford on the Perquimans River and Hertford Park.

While the Perquimans County Recreation Department offers a variety of activities the ultimate goal of the department is to have some type of activity available for everyone throughout the entire year. In order to meet these needs new facilities such as a gymnasium with classrooms and meeting rooms, and new outdoor fields and courts are needed.

There are six other private recreational facilities in the county that are used by the public, each of these sites is a water access area with the primary recreational emphasis on boating. These areas are:

Bethel Fishing Center	1.0 acre
Larry's Drive In	0.3 acre
Town of Hertford Boat Launch	0.5 acre
White Hat Landing	0.3 acre
New Hope Boat Launch	0.3 acre
(Wildlife Commission)	
Snug Harbor Marina	0.6 acre

EDUCATIONAL FACILITIES

Perquimans County has three elementary schools, one junior high and one high school. The enrollment for 1984-1985 school year for grades K-12 was 1772. This was down from the 1974-75 enrollment figure of 2,115. Although enrollment has declined in the last several years, some growth is anticipated for the next five or six years. A leveling off period, or period of little growth, is expected from 1990 to 1995.

In the 1976 CAMA Land Use Plan, the potential renovation of the high school was discussed. This project began in the last part of 1986. When this is complete, the high school will be more than adequate to handle the needs of the next ten years. With the limited growth projections of the next ten years, all present facilities should be adequate to meet future demand with regular maintenance and repair.

ROADS

U.S. Highway 17 and NC 37 are the two primary roads which run through Perquimans County. While traffic on Hwy. 17 is considered fairly light during the winter months, it is quite heavy in the summer months as people travel to and from the coast. There are plans to widen Hwy. 17 into four lanes. Studies are now being done on the section of this highway from west of Hertford to where the existing four lane highway begins near Woodville. There are no plans to improve or enlarge Highway NC 37.

Perquimans County has over 270 miles of secondary roads and over 75 miles of unpaved road Each year through the Secondary Roads Program, roads are selected by the Department of Transportation and the County Board of Commissioners to be improved. Only a limited amount of funds are allocated to this program each year, so only roads of top priority are selected.

Over the next ten years, top priority will be given to maintaining the roads that are paved and second priority will be paving existing unpaved roads. Perquimans County subdivision regulations are unusual in that they allow private internal roads in new subdivisions. These roads are not required to be paved by the developer and can lead to maintenance problems.

To compound this problem, as of September 1975 all roads taken over by the state have to be recorded, a right of way dedicated to the state, and paved. This ruling eliminates the possibility of the State accepting many of the streets in existing subdivisions in Perquimans County.

IMPACT OF SEASONAL POPULATION

The Perquimans County Water System reports that water usage during the summer months is approximately 10% higher than the year-round average. This increase is attributed more to greater usage by full-time residents than to seasonal increases in county population. The impact of seasonal population is negligible in Perquimans County.

PERQUIMANS COUNTY: ESTIMATED DEMAND

HOUSING

Population projections for Perquimans County indicate an increase of 821 persons from 1980 to 1990. In 1980, the average persons per dwelling unit in Perquimans County was approximately 2.45. Assuming that this same household size remains constant, there will be a need for 335 new dwelling units by 1990.

Based on a minimum lot size of 15,000 square feet, approximately 115 acres of land will be needed for these new housing units.

SCHOOLS

Enrollment in the Perquimans County Schools is now under the system's capacity, and enrollment is expected to decline during the planning period. No new classroom construction will be needed because of enrollment growth during the planning period.

WATER SERVICE

Treatment capacity of the water system 612,000 gpd. The plant is now treating approximately 355,000 gpd. Using a liberal estimate for water sewage of 100 gallons per resident per day, the additional 821 county residents would require 82,000 additional gallons of water daily, well within the excess capacity of the water system.

SOLID WASTE

The expected life of the county's landfill is approximately 6 more years, with or without new population growth. The expected life of the Hertford-Winfall Landfill is just 10 years. All governmental jurisdiction in Perquimans County will need a new solid waste disposal facility during the planning period.

POLICE

County police services are provided by the County Sheriffs Office and The City of Hertford Police Department. The County has no plans to increase the number of personnel now providing police services, but should the need arise the County will consider expansion of these services.

FIRE

Seven volunteer fire fighting units now provide fire protection in the County. The County at this time does not anticipate the creation of paid fire fighting force but will continue to rely on volunteer services for the planning period. The County will continue to fund a portion of the expenses of the volunteer units and will acquire needed equipment and facilities as needed.

RESCUE SERVICE

The rescue squad consists of eleven ambulance attendants and thirty-nine EMTs. Fifteen of the EMTs are eligible for retirement in 1987. The squad operates a day shift and a night shift.

1986 Perquimans County Land Use Plan Update

Weekend and night shifts are well staffed; however, covering the day shift is becoming more difficult as most of the volunteers have other full-time jobs. In order to provide adequate coverage of the day shifts, the possibility of going to paid attendants and EMTs may soon have to be considered.

PUBLIC ADMINISTRATION

The County is totally committed to the County Manager System of Government and will continue to operate with a full-time managerial staff.

CONTINUING PUBLIC PARTICIPATION IN PLANNING MATTERS

Perquimans County recognizes its responsibility toward keeping its citizens informed of all issues concerning the county. The County Commissioners also recognize the political reality of educating the public in regard to the issues being decided. It is the County's policy to encourage attendance by the public at all meetings of its various boards and committees. The County encourages coverage of all issues by various media representatives and invites active public participation in all issues.

During the preparation of this land use plan update, Planning Board Meetings were held on a regularly scheduled date (the second Thursday of every month), and public notices were placed in the local newspaper.one week prior to each meeting. A questionnaire was circulated county-wide, soliciting public responses on a variety of planning issues.

The county will rely on public discussion and media coverage to present the various facets, impacts, and costs associated with the various policy issues. Expert assistance will be sought to educate and to give guidance both to the general public and to the Board of Commissioners on issues whenever the Board feels such assistance is required.

POLICY DISCUSSION

CAMA regulations require the coastal counties to develop local policy statements concerning a variety of development issues. These issues are divided into five general categories:

1) resource protection; 2) resource production and management; 3) economic and community development; 4) citizens participation; and 5) storm hazard mitigation. Each of these categories contains a listing of specific issues that must be addressed by all participating jurisdictions in the twenty coastal counties. All additional issues of local concern are emphatically encouraged to be included in this land use update.

Perquimans County is a rural county that is beginning to experience significant development pressures. These development pressures are having their greatest impact along the counties estuarine shore. In the past five years, thirteen new subdivisions have been platted in the county; all have had some frontage on the estuarine shore.

Building permit information is unavailable for all previous years because of the previous building inspector's practice of discarding all permit records at the beginning of each new fiscal year. Between January 1, 1986 and June 1, 1986, 120 building permits have been issued for new construction or mobile home placement. In the recollection of most informed persons in county government this substantially more permits than have been issued in recent years.

The Building Inspector's position heretofore has been a half-time job. It has now been expanded into a full-time position. During the past two years the county also employed its first full-time county manager. Enforcement of the State Building Code, The National Flood Insurance Program, and local subdivision regulations is the responsibilities of these two county staff members.

Such a limited staff must depend on outside agencies for assistance in controlling development. The local District Health Department and CAMA Field Office personnel in Elizabeth City assist the County by enforcing requirements within their particular permitting jurisdictions. The County intends to develop a mobile home park ordinance and to update their subdivision regulations during the coming year in order to gain greater control of development.

The following policies, developed during this plan update, reflect the County's limited staff and the county's decision to rely on various state and federal agencies with permitting jurisdiction to assist in controlling development.

POLICY ISSUES: RESOURCE PROTECTION

ISSUE: Constraints to Development: AEC'S

FINDING:

The Estuarine System is the only category of AEC's under state permitting jurisdiction in Perquimans County.

Of greatest concern to the county is the increased development of its shoreline areas. The Perquimans County Planning Board approved the platting of 26 subdivisions for development along the county's estuarine shoreline during 1986. During 1987, request for subdivision approvals with shoreline access have not been as numerous, but generally have been for larger subdivisions with greater numbers of lots.

PREVIOUS 1981 POLICY:

The previous Perquimans County Land Use Update did not develop policies for AEC categories; instead, it developed policies for specific environmental problems such as pollution of the Perquimans River and Albemarle Sound.

"Perquimans County realizes the potential resource value of the Perquimans River and the Albemarle Sound. It shall be the policy of Perquimans County to cooperate, as it has done in the past, with state and federal agencies and with other units of local government in trying to identify and solve the pollution of this valuable water system."

CURRENT 1986 POLICY:

Perquimans County totally supports the efforts of the Division of Coastal Management to prevent the further degradation of the estuarine resources of Perquimans County. Perquimans County, during the process of updating the county's land use plan, has adopted numerous policies and has developed various strategies to reduce water quality degradation in the county. The county has adopted policies concerning the use of "Best Management Practices" in both forestry and agriculture. The county has developed various regulatory measures to mitigate the impacts caused by new developments on these areas of environmental concern. Perquimans County is committed to the protection of its resources and will take what actions it deems necessary and feasible to protect its resources.

The County is now in the process of updating its subdivision regulations and has recently adopted a Mobile Home Park Ordinance. Perquimans County intends to gain greater control over new development in the county, particularly along its shoreline.

IMPLEMENTATIONS STRATEGIES:

The County is currently updating its subdivision regulations. One of the requirements of this ordinance is that a certificate be place on the face of the plat acknowledging whether the subdivision is located totally or partially within an AEC and requiring a CAMA permit before any construction can begin.

The County is considering requesting the State Sedimentation Control Commission to exercise its jurisdiction in Perquimans County. The County would request a certificate to be attached to each

1986 Perquimans County Land Use Plan Update

subdivision plat certifying compliance with the Sedimentation Pollution Act before approval can be considered.

The County has requested a map from the Division of Archives and History that identifies the general location of archaeological sensitive areas within the county. A copy of this map is included in <u>APPENDIX 2</u> of this document

ISSUE: Soil Limitations

FINDINGS:

Most soils in Perquimans County pose limitations to development. Slightly more than 72% of the soils in the area have severe limitations for septic tank absorption, building foundations, and street and road construction. These areas are generally characterized by a high water table, frequent and occasional flooding, and low load-bearing strength. Only one area in the county is characterized as having only slight limitations to development; this area is located in the western part of the county near the Suffolk scarp. Erosion is not a significant problem of the county because of the gentle slope of most of its areas. Slopes in the county seldom exceed 6% except in areas along stream and river banks and along the estuarine shore. In these areas erosion is a problem.

PREVIOUS POLICIES:

None

CURRENT 1986 POLICY:

The county will take steps to minimize development on soils that have severe limitations and to minimize the hazards associated with development on these soils.

IMPLEMENTATION STRATEGIES:

The county will ask representatives of the US Soil Conservation Service and the Perquimans County Health officer to review and to make comments on subdivision requests in known problem soil areas and will seek assistance from these agencies for proper soils management.

The County will continue to enforce Health Department Regulations concerning the installation of septic systems.

To minimize any hazardous conditions. the County will require that all developments on soils with severe limitations be built using the most responsible construction, design, and management techniques possible.

The County will require an erosion plan to be provided for any subdivision projects that propose to clear, alter, or excavate land in excess of one acre.

ISSUE: Flood Plain Development

FINDINGS:

The widths of the flood hazard areas in Perquimans County, in general, are rather narrow when compared to those of other counties in North Carolina's Coastal Region. For the most part, streams and rivers in Perquimans County cut relatively deep channels. Stream bank elevations, even along most of the broad portion of the Perquimans River south of the "S" Bridge in Hertford, rise steeply to elevations of 6' to 10' above mean sea level. Wind tides are the most frequent cause of flooding in the county. Flooding generally occurs along the short, minor tributaries draining into the Perquimans River and along the northern section of the Perquimans River north of Hertford.

Even though the flood plains in Perquimans County are not broad, extensive subdivision and residential construction has occurred in these flood plain areas, with most having occurred before any flood plains construction standards were being enforced. The County is now participating in the regular phase of the National Flood Insurance Program and is enforcing the FEMA Flood Hazard Area Construction Standards.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

The county will use every reasonable effort to minimize the threats to life and property from flooding.

IMPLEMENTATION STRATEGIES:

The County will:

Continue to enforce the FEMA Construction Standards in all identified Flood Hazard Areas.

Prevent needless development from occurring in identified Floodway Areas.

Consider requiring additional elevation monuments to be placed in all subdivisions.

Consider requiring elevation contours to be placed on subdivision plats of larger subdivisions.

ISSUE: Septic Tank Limitations

FINDINGS:

According to soil information provided by the US Soil Conservation Service, approximately 72% of the land area in Perquimans County is subject to severe limitations for septic tank use. Limitations are due to a variety of reasons, such as high water tables, flooding, low filter capacity, and poor percolation. Much of the remaining area of the county has moderate septic tank limitations with very few areas rated as having

slight limitations. In many cases, limitations can be modified by special drainage construction, applications of infill soils, or special maintenance.

Two areas of particular concern are two larger, older subdivisions, Snug Harbor and Holiday Island. These two subdivisions were platted and developed before the county adopted subdivision regulations and before the Health Department had minimum lot size regulations. These areas have many platted lots that are substantially smaller than the minimums now required by the Health Department for a septic permit.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

The county will not permit development densities in excess of mini- mums allowed by the Department of Health for adequate septic tank operation.

IMPLEMENTATION STRATEGIES:

The County will continue to follow Health Department Regulations concerning the size and placement of septic systems.

The County will consider requiring some other type of waste disposal in older subdivisions where platted and developed lots are at greater densities than is now permitted by the Department of Health.

The County will work closely with the U.S. Soil Conservation Service and the Division of Environmental Management to regulate the construction and placement of all agricultural lagoons in the county.

The County will require that all requests for Subdivision Permits be reviewed by the County Health Officer and by the Soil Conservation Service.

ISSUE: Freshwater, Swamps, and Marshes

FINDINGS:

Freshwater swamps and marsh lands cover approximately 10% of Perquimans County. Development in or near these wetland areas located south of the railroad bridge near Hertford, NC, is controlled by the County's subdivision regulations, by Health Department regulations, and by the CAMA and 404 Wetlands permitting process. Local subdivision regulations and county-wide Health Department regulations concerning septic tank installation and placement impose the only development controls in areas north of the railroad bridge.

The major land use threats to the swamp lands come from agricultural and forestry activities. These swamps contain large stands of Bald Cypress and Gum. The natural nutrient load in these waters is very rich, making them extremely susceptible to additional nutrient loads caused by erosion or agricultural run-off.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

The County will encourage the use of Best Management Practices as recommended by the US Soil Conservation Service in both forest and agricultural land management in order to minimize damage by either of these two vital county economic activities.

IMPLEMENTATION STRATEGIES:

The County will rely on the development regulations it now has in force to control residential, commercial, and industrial development in these wetland areas.

The county will consider amending its Subdivision Regulations to require special treatment of swamp and wetland areas in proposed subdivision developments.

The County will encourage the local Soil Conservation District to maintain an ongoing educational program that emphasizes the techniques of Best Management Practices for forestry and farm management.

ISSUE: Cultural and Historical Resources

FINDINGS:

Perquimans County has over eighty sites that are considered to be of historic value. Ten of these are listed in the National Register of Historical Places. Presently, sixty-six sites are on the state's National Register Study List. In Potential for Outdoor Recreation in Perquimans County, prepared by the Perquimans County Soil Conservation District, historical sites are ranked as having one of the highest potentials for recreational development. With their ability to draw people from other areas to Perquimans County, these sites could be of economic importance to the county if properly developed and promoted. The following are on the National Register of Historical Places:

Belvedere Plantation, Belvedere Cove Grove, Hertford Vicinity Land's End, New Hope Vicinity Myers-White House, Bethel Vicinity Newbold-White House, Hertford Vicinity Samuel Nixon House, Winfall Vicinity Stockton, Woodville Vicinity Sutton-Newby House, New Hope Vicinity Isaac White House, Bethel Vicinity Perquimans County Courthouse, Hertford

A complete listing and Map of all 66 sites appears in Appendix 3 of this document.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

The county will encourage the preservation and development of its historical sites.

IMPLEMENTATION STRATEGIES:

The county will encourage and support the efforts of local historic preservation activities, particularly the cataloging of all historically and culturally significant sites in the county.

ISSUE: Man-made Hazards and Nuisances

FINDINGS:

The county transportation network constitutes the principal man-made hazard in Perquimans County. Bulk storage facilities for products such as fuels, agricultural chemicals, fertilizers, and grains are the second most frequently occurring man-made hazard. Community nuisances such as poorly screened salvage yards, land fill operations, and livestock operations cause some concern to residents in the county.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

It shall be the policy of Perquimans County to place adequate controls on development so as to mitigate any threats to public health and safety from man-made hazards.

It shall be the policy of Perquimans County to the extent practical to reduce nuisances and conflicts caused by the intrusion of live- stock operations into existing residential areas and the intrusion of residential subdivisions into areas in close proximity to existing livestock operations.

IMPLEMENTATION STRATEGIES:

The County will consider including in its subdivision regulations special setback requirements for hazardous storage facilities.

The County will work with the Department of Transportation to control the number and widths of, as well as the intervals between, access points linking subdivision developments and the county's existing streets and roads.

ISSUE: The Use of Package Treatment Plants

FINDINGS:

The largest package treatment plant in Perquimans County is located at Holiday Island. This plant serves the camping section of this subdivision. The Property Owner's Association at Holiday Island is responsible for maintenance of this plant.

The Perquimans County Subdivision Regulations have no provisions governing the installation of package sewage treatment plants in subdivisions or mobile home parks. Each package treatment plant in the county serves only one facility.

PREVIOUS POLICY:

None

CURRENT POLICY

The County will rely on the permitting activities of the Department of Health and the Department of Environmental Management to control the installation, placement, and operation of sewage package treatment plants.

IMPLEMENTATION STRATEGIES:

The County will consider adding provisions to its Subdivision Regulations to control the installation of sewage treatment plants and to insure the continued operation and maintenance of these plants.

ISSUE: Protection of Potable Water Supply

FINDINGS:

Protection of potable water supplies is a primary concern in Perquimans County. Both the County and the Town of Hertford have public water systems that together distribute treated water to all areas of the county; however, not every home in the county is served by the system.

The Perquimans County Water System draws its water from relatively shallow wells penetrating the Upper Yorktown Aquifer. These wells are all less than 150 feet deep. Water in aquifers lying beneath the Upper Yorktown and even in the lower strata of the Upper Yorktown is often unusable because of the intrusion of salt water. Protection of these shallow aquifers is of vital concern to the county.

PREVIOUS POLICY:

None

CURRENT POLICIES:

The County shall cooperate fully with all state and federal agencies to protect the ground water supplies in the county.

IMPLEMENTATION STRATEGIES:

The County will rigorously enforce the public facility service requirements of its Subdivision Regulations and work closely with the Department of Health to insure that ground water supplies are not threatened by poor placement or inadequate filtration of septic systems. Of particular concern is the threat to agricultural production in the county should agricultural run-off be blamed for all pollution problems that occur in the rivers and swamps of the county.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

The County will encourage the use of Best Management Practices to control excessive storm water run-off from agricultural lands, with special emphasis on the vulnerability of the County's fragile areas.

IMPLEMENTATION STRATEGIES:

The County will encourage the Perquimans Soil Conservation District to continue its Best Management Practices educational programs stressing the control of agricultural run-off.

ISSUE: Stormwater Run-off -- Residential Development

FINDINGS:

Surface run-off from residential areas is not a significant problem in Perquimans County at this time. The county is primarily rural, with the only incorporated areas being Hertford and Winfall. The terrain of the county is generally level.

Residential development pressures have not been severe. Residential densities are restricted to a maximum of one unit per 15,000 feet. The amount of development and its densities do not pose any great threat to the surface waters in the region at this time.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

It shall be the policy of Perquimans County to regulate residential subdivisions so as to prevent the overburdening of existing waterways and drainage systems by excessive surface run-off, with particular attention to fragile areas of the county.

IMPLEMENTATION STRATEGIES:

The County will require that a drainage plan be submitted for all major subdivision plats before approval is granted.

ISSUE: Marina and Floating Home Development

FINDINGS:

Perquimans County, at this time, does not have any floating home developments. Only one marina, located at Snug Harbor, is now operating in the county. However, an additional marina has been discussed by the Planning Board as a way to aid in the development of the county. The county will support the location of a marina of almost any size in Perquimans County.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

Perquimans County will support the construction of a marina within the county of almost any size. The establishment, of course, will have to comply with all County, State and Federal permitting authorities.

IMPLEMENTATION STRATEGIES:

None

ISSUE: Industrial Impact on Fragile Areas

FINDINGS:

All manufacturing industries in Perquimans County are located in the towns of Hertford and Winfall. There is no evidence that any of these industries create any negative impacts on the fragile areas in the county.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

The County will work with local industrial development committees to identify industrial sites that will not negatively affect any of the county's fragile areas.

IMPLEMENTATION STRATEGIES:

The County will encourage the local industrial development committees to identify potential industrial sites that, when developed, will not adversely affect the County's fragile areas. The fragile areas of particular concern are surface waters, wet-lands, and historic sites.

1986 Perquimans County Land Use Plan Update

Development of Sound and Estuarine System Islands ISSUE:

FINDING:

Not an issue

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

None

IMPLEMENTATION STRATEGIES:

None

POLICY ISSUES:

RESOURCE PRODUCTION AND

MANAGEMENT

ISSUE: Productive Agricultural Lands

FINDINGS:

The 1982 Census of Agriculture reported that of Perquimans County's approximately 160,000 acres, 86,376 were in farmland. Most of the county is suitable for agricultural production. The agricultural areas with the fewest production limitations, according to soil association characteristics, occur between Mills Creek and Sutton's Creek and along the Perquimans River and its tributary streams and their wetlands.

According to the North Carolina Department of Natural Resources and Community Development publication <u>SOIL ASSOCIATIONS of the COASTAL AREA</u> <u>MANAGEMENT REGION</u>, almost all soils in Perquimans County have a potential productive capacity rating of 90 bushels of corn or 40 bushels of soybeans or better. Many of these soils require special drainage systems to achieve this potential, and actually have such systems in place.

Productive farm lands are in great abundance in Perquimans County and, as yet, have not been seriously threatened by unreasonable or unmanageable urban growth.

PREVIOUS POLICY:

Not considered an issue.

CURRENT 1986 POLICY:

Perquimans County does not feel that its productive agricultural lands are being threatened by unreasonable or unmanageable urban growth; however, it shall be the County's policy to encourage land owners to keep their lands in productive agricultural use.

IMPLEMENTATION STRATEGIES:

The County will encourage continued productive use of agricultural land by granting preferential tax relief to farmed lands in areas of great development potential.

ISSUE: Commercial Forest Land

FINDINGS:

According to the NC Forestry Service, commercial forestry lands have steadily decreased in Perquimans County since 1950. In 1950, there were 102,000 acres of forest land in Perquimans County. By 1983, this had decreased to 74,582 acres. Much of this loss is the result of forest land being cleared for agricultural use, with much of the recent clearing taking place in the Dismal Swamp area. Over the last several decades reforestation activities have not kept pace with forest removals. The findings of a recent drain study prepared by the NC Forestry Service show that timber removals averaged 20% more than new timber growth in Perquimans County annually between

1979 and 1983; and between the years of 1960 and 1970, removals exceeded growth by 50% annually.

Should this trend continue at the present rate, the State Forestry Service estimates that in 100 years there would be no timberland left in Perquimans County. In recent years, reforestation efforts have increased, primarily due to disappointing prices for farm commodities. Removal still exceeds growth, but the gap is narrowing.

PREVIOUS POLICY:

"Perquimans County encourages commercial forest companies and private forestland owners to use the most modern timber management practices. It also encourages the development of new industries within Perquimans County which can utilize the local timber harvested in the production of salable goods." CAMA LAND DEVELOPMENT PLAN UPDATE for Perquimans County, North Carolina

CURRENT 1986 POLICY:

Perquimans County encourages the use of the most efficient and productive forestry practices and strongly encourages reforestation as an ongoing management practice.

IMPLEMENTATION STRATEGIES:

The County will provide preferential tax relief to property owners who maintain tracts of productive forest lands in areas with great development potential.

ISSUE: Commercial and Recreational Fishing

FINDINGS:

Information from the NC Wildlife Commission indicates that there were 115 licensed fishing vessels in Perquimans County in 1983: 17 full-time commercial vessels; 53 part-time commercial; and 45 leisure craft. The N.C. Division of Marine Fisheries reported a total of 287,355 pounds of fish sold from commercial fishing vessels licensed in Perquimans County in 1983. The 1983 dock side value of fish caught by Perquimans fishermen was \$69,974.00. This amount is only a small amount of the county's total income, but it does represent an increase of commercial fishery sales in Perquimans County. The amount of fish landed has increased by 201,255 pounds or more than 330% since 1979.

Recreational fishing is a big draw for the county. Of the licenses sold in the last ten years, more than half have been purchased by people who live outside North Carolina.

PREVIOUS POLICY

"...the County encourages commercial and recreational fishing in [its]...waters and will cooperate with other local governments, state and federal agencies to control pollution of these waters to a condition that commercial and recreational fishing will in-crease."

CAMA LAND DEVELOPMENT PLAN UPDATE for Perquimans County, North Carolina.

CURRENT 1986 POLICY:

Same as previous policy.

IMPLEMENTATION STRATEGIES:

The County will encourage local civic groups to promote recreational fishing along the Perquimans River by sponsoring frequent fishing tournaments.

The County is planning to build two artificial fishing reefs, one at Harvey's Point and the other at Grassy Point Light.

The County will work with the State Wildlife Commission and the CAMA Public Beach Access program to provide public access for recreational fishing.

ISSUE: Existing and Potential Mineral Production

FINDINGS:

There are no mineral deposits being mined in Perquimans County at this time. There is no information indicating that any mineral deposits of economic value exist in the county. The 1980 CAMA land use update prepared for Perquimans County indicates that several years ago an investigation was begun on a titanium deposit in the county, but abandoned because the site of the deposit could not be acquired. Since that time, no other mining companies have expressed interest in development of this or any other mineral.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

This is not an issue.

IMPLEMENTATION STRATEGIES:

None

ISSUE: Off-Road Recreational Vehicles

FINDINGS:

Off-road recreational vehicles are allowed to operate on private lands provided the property owner approves. The County does not attempt to regulate the use of these vehicles by any means other than traditional police action regarding trespassing. Most off-road vehicles operating in the county are involved in forestry, farming, or fishing, three important county economic activities.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

Not an issue

IMPLEMENTATION STRATEGIES:

None

ISSUE: Residential, and Commercial Land Development Impact on Any Resource

FINDINGS:

Residential development in Perquimans County occurs most frequently along or near the Albemarle Sound and along the Perquimans River south of the US 17 Bypass.

Most recent commercial development in the county has occurred along the US 17 Bypass near Hertford. The most serious development impact to the county's natural resources is the loss of agricultural and forest lands, and this impact has been minimal.

Neither commercial nor residential developments are occurring so rapidly that they have become unmanageable, nor are they causing any unreasonable impact on the county's natural resources.

Residential construction has been slow during the past five years; however, 1986 thus far has produced much more subdivision platting activity than in most recent years.

PREVIOUS POLICY:

None

CURRENT 1986 POLICY:

Any activity naturally has some impact on its surrounding environment. The economic impacts caused thus far by residential and commercial developments in Perquimans County have been more beneficial than the miniscule losses of agricultural and forest lands. The impact of development on county resources are not of such serious magnitude or nature to warrant a formal policy at this time.

IMPLEMENTATION STRATEGIES:

None

POLICY ISSUES:

ECONOMIC AND COMMUNITY DEVELOPMENT

ISSUE:

Industrial Development Impact on any Resource

FINDINGS:

All manufacturing activities in Perquimans County are located in the Towns of Hertford or Winfall. The county's only new manufacturing establishment during the past five years is Apricot Industries, Inc. (90 employees), which is located in an existing structure in Hertford. This new industry has caused no new or unusual impact on the local environment or on the town's public facilities.

Organized efforts are under way in the county to promote tourism and to recruit new industries to the area.

PREVIOUS 1981 POLICY:

None

CURRENT POLICIES:

The County supports the actions of the Industrial Development Committee and the Committee of One Hundred in their efforts to improve and promote economic activities in Perquimans County while at the same time protecting the natural resources of the area. The County seeks small, non-intensive water using industries. The preferred locations is near Hertford and Winfall where access to transportation and public facilities.

IMPLEMENTATION STRATEGIES:

Perquimans County and the Towns of Hertford and Winfall have established an Industrial Development Committee and a Committee of One Hundred in an effort to recruit new industries to the area. One of the projects of these committees is to identify and locate suitable sites of various sizes for use by prospective industries. The selection criteria for industrial sites are designed to minimize negative impacts on the community and the county's natural resources.

ISSUE: Peat or Phosphate Mining Impact on any Resource

FINDINGS:

This is not an issue in Perquimans County.

PREVIOUS 1981 POLICY:

This is not an issue.

CURRENT 1986 POLICY:

This is not an issue.

IMPLEMENTATION STRATEGIES:

None

ISSUE: Types and Location of Industry Desired

FINDINGS:

For several years Perquimans County and the Town of Hertford have listed the encouragement of industry to the area as a top priority. With the expansion of the county water system, industrial development sites are possible in most parts of the county.

With the exception of some agricultural operations and neighborhood commercial establishments, industrial development in Perquimans County has occurred in or near Hertford or Winfall. All manufacturing, regional shopping, and regional service establishments are located in these two towns and are serviced by public water and sewer services.

Establishments that have planned future expansion have indicated that sites in or near Hertford are preferred because of the availability of public services and convenient access to U.S. High- way 17.

PREVIOUS 1981 POLICY:

"It shall be the policy of Perquimans County to actively solicit the location of small, dry [not water intensive] industry. These industries will be encouraged to locate near existing population concentrations or along major transportation routes." <u>CAMA Land Development Plan Update For Perquimans County, North Carolina; Ferren Planning Group</u>

CURRENT 1986 POLICY:

Same as previous policy.

IMPLEMENTATION STRATEGIES:

The County will use The Rules and Regulations of the Perquimans County Water System as a means to guide industrial development toward areas served by 6" water lines and convenient transportation access.

ISSUE: Local Commitment to Provide Services To
Development

FINDINGS:

Upon completion of Phase II of the county water system, no more water lines will be extended by the county. It is now up to the developer or potential user of the water to pay for the installation of these lines.

The Perquimans County Subdivision Regulations require that all new subdivisions have public water lines installed to service each lot if water is available within a reasonable distance. All new water lines installed on public right-of-way will be dedicated to the county.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY:

The County will enforce the rules and regulations of the county water system as to how, when, and where water service will be provided to new development.

IMPLEMENTATION STRATEGIES:

The County will continue to adhere to the rules and regulations of its water system and to enforce the public facilities requirements of its adopted subdivision regulations.

ISSUE: Types of Urban Growth Patterns Desired

FINDINGS:

While development in the county has been fairly slow over the past twenty-five years, twenty-six residential subdivisions have been developed along the Albemarle Sound and along the Perquimans and Little Rivers; thirteen of these subdivisions were platted during the last five years.

In most cases new residential development has occurred in these subdivision clusters or on widely spaced individual lots, typical of a rural setting. Mobile homes continue to be the most frequent type of new housing development in the county.

The County does not now have a mobile home park ordinance to regulate development of rental mobile home facilities.

Most of the recent commercial development in the county has occurred along Hwy. 17 in or adjacent to Hertford or in existing crossroads communities. Development seems to be occurring in the preferred clustered pattern described in the 1980 land use update.

PREVIOUS 1981 POLICY:

"It shall be the policy of Perquimans County to encourage clustered residential development on lands considered suitable for such development by the local Health Department and the Soil Conservation Service. All future development will conform to the county's subdivision regulations and any other land use regulations in force at the time."

<u>CAMA Land Development Plan Update for Perquimans County, North Carolina, Ferren Planning Group, July 1981</u>

CURRENT 1986 POLICY:

Same as previous policy.

IMPLEMENTATION STRATEGIES:

The Planning Board and the County Commissioners will consider the adoption of a mobile home park ordinance during the coming year.

ISSUE: Redevelopment of Developed Areas

FINDINGS:

The only areas in the county that can be considered developed are the Towns of Hertford and Winfall. Hertford has undergone a substantial amount of residential redevelopment during the past five years through the implementation of Community Development Block Grant Programs and through private initiatives as well.

Two major waterfront subdivisions in the county, Snug Harbor and Holiday Island, have numerous platted lots that are too small by current State Health Department regulations. These areas would benefit through the installation of a community sewage disposal system and a replatting of substandard sized lots.

Substandard housing is scattered throughout the county with the only areas of concentration being in the Towns of Winfall and Hertford.

PREVIOUS 1981 POLICY:

"...The county will seek assistance of state and federal agencies to best determine the course of action most appropriate to mitigate concentrations of poor housing conditions in the County."

<u>CAMA Land Development Plan Update for Perquimans</u>

<u>County, North Carolina, Ferren Planning Group, July 1981</u>

CURRENT 1986 POLICY:

The County will seek to eliminate substandard housing in the county.

IMPLEMENTATION STRATEGIES:

The County will attempt to identify the extent and location of sub-standard housing in the county and seek state and federal assistance as it deems necessary.

The County will continue to enforce the NC Building Codes as a means to reduce the frequency of substandard housing.

ISSUE: Commitment to State and Federal Programs in the Area

FINDINGS:

It always has been the policy of Perquimans County to cooperate with state and federal agencies.

PREVIOUS 1981 POLICY:

"It shall be the policy of Perquimans County to cooperate with state and federal agencies in the assessment of proposed projects sponsored by such agencies which will impact directly on the residents of Perquimans County." <u>CAMA Land Development Plan Update for Perquimans County</u>, North Carolina, Ferren Planning Group, July 1981

CURRENT 1986 POLICY:

The County will continue to cooperate with all state and federal actions that benefit the residents of Perquimans County and will let its objections be known should it feel that state and federal policies are not in the best interest of its citizens.

The County supports the Department of Transportation in its efforts to four-lane U.S. Hwy. 17 in Perquimans County.

IMPLEMENTATION STRATEGIES:

None needed

ISSUE: Assistance to Channel Maintenance and Beach
Nourishment Projects

FINDINGS:

This is not an issue in Perquimans County.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY:

This is not an issue.

IMPLEMENTATION STRATEGIES:

None needed.

ISSUE: Energy Facility Siting and Development

FINDINGS:

Perquimans County considers the possibility of an energy facility site developing in the county to be very remote. Therefore, no policy on this issue is necessary. However, should this become an issue in the future, a policy will be developed at the appropriate time.

PREVIOUS 1981 POLICY:

This is not an issue.

CURRENT 1986 POLICY:

This is not an issue.

IMPLEMENTATION STRATEGIES:

None needed

ISSUE: Tourism, Waterfront Access, and Estuarine Access

FINDINGS:

Perquimans County does not control any points of access to any beach or waterfront area. However, there are several private access points and road ends controlled by the Department of Transportation. Tourism, at present, is not a major factor in the local economy. However, it is growing in significance and holds a great deal of potential.

The Town of Hertford presents an attractive, picturesque setting that could be capitalized on if an extensive downtown revitalization and historic preservation program could be successfully carried out. All approaches to the town afford scenic views. Waterfront development is somewhat hampered by the US 17 Highway Bridge. The span of the bridge is too low to allow tall-masted sailing cruisers to pass under.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY:

The County will seek to acquire the right of way, title, or easement of property that will provide public access to beach and waterfront areas.

IMPLEMENTATION STRATEGIES:

The County will apply for a grant through the Division of Coastal Management to study the possibilities of public waterfront access and boat ramps in the county.

ISSUE: Types of Density, Location: Units per Acre of Anticipated Residential Development and Services

Necessary to Support Such Development

FINDINGS:

Development density in Perquimans County is controlled by Health Department Regulations governing septic tank installations. Generally speaking, the minimum lot size in the county is 15,000 square feet for lots served by public water, and 20,000 square feet for lots not served by public water. These minimums are based on the general characteristics of soils in the county. Specific soil types and specific sites may

require additional land area for proper operation of the septic systems. If additional land area is required for development, the lot size minimum usually doubles, requiring 40,000 square feet.

The towns of Hertford and Winfall and the camping section of Holiday Island are the only places in Perquimans County that have public sewage facilities. These are the only areas in the county where densities could exceed the one dwelling unit/ 15,000 square feet county minimum.

PREVIOUS 1981 POLICY:

None

CURRENT 1986 POLICY:

The County will encourage high density and industrial development to locate near Hertford and Winfall where water and sewer services are provided.

IMPLEMENTATION STRATEGIES:

The County will consider the use of zoning regulations to guide these types of development to areas most suited for these types of land use.

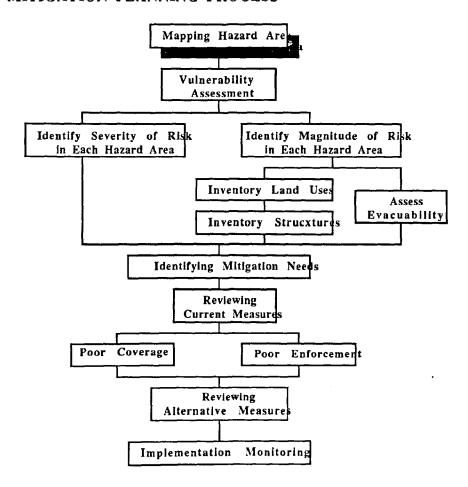
STORM HAZARD MITIGATION, POST-DISASTER RECOVERY PLAN

The purpose of this section is two fold:

- 1) to assist the county in managing development in those areas most likely to suffer damages from a severe storm or hurricane and
- 2) to reduce the risk to life and property from future hurricanes.

High winds, flooding, intense wave action, and coastline erosion are the four physical forces of a severe storm or hurricane that create threats to life and property. Flooding claims the most lives during severe storms or hurricanes; high winds cause the most property damage. Only by identifying those areas in the county most likely to suffer damage from any of these forces or combination of these forces can a community develop a meaningful storm mitigation plan.

STORM MITIGATION PLANNING PROCESS



Using the planning scenario recommended in <u>BEFORE THE STORM: Managing</u>
<u>Development to Reduce Hurricane Damages</u>, by McElyea, Brower, and Godschalk, the community can identify the areas most likely to sustain storm damages and make a

vulnerability assessment of the identified storm hazard area. The vulnerability assessment includes the severity and magnitude of risk in each storm hazard area. The preceding chart taken from <u>BEFORE THE STORM</u> outlines the procedure and the sequence of steps used in the storm hazard mitigation process.

STORM HAZARD AREA

The following Composite Hazard Map(PAGE) indicates those areas in Perquimans County most likely to sustain damage from flooding and other water related hazards, such as wave action and shore erosion. The map is a composite of the flood hazard areas indicated on Slosh Maps prepared by NC Division of Emergency Management, and of identified Areas of Environmental Concern located in the county. All of the county is assumed to be susceptible to wind damage so this area is not mapped.

VULNERABILITY

Vulnerability of an area is measured by both the severity and magnitude of risk. The severity ranking is based on the number of physical forces likely to affect a particular identified storm hazard area. The rankings suggested by McElyea, Brower, and Godschalk is a scale from 1 to 4. Areas likely to receive damage from all four physical forces of a hurricane are ranked as 1; those receiving only wind damage are ranked as 4. The magnitude of risk is based on the population and the number and value of developed properties in the storm hazard areas.

Severity of Risk

The table below ranks the severity of risk associated with the identified storm hazard areas in the county and the physical forces affecting the different areas.

RISK TABLE FOR HAZARD AREAS

HAZARD AREA	EXPOSURE TO DAMAGING FORCES					
	SEVERITY RANK	EROSION	WAVE ACTION	FLOODING	HIGH WIND	
PUBLIC TRUST WATERS	4			+	+	
FLOOD HAZARD AREA	3	0		+	+	
REST OF COMMUNITY	4				. +	

Exposure Level (+) High

(0) Moderate

(#) Low

Magnitude of Risk

As the Risk Table shows, severe storms and hurricanes most seriously affect the estuarine shoreline. All four physical storm forces inflict damage to this narrow, 75-foot ribbon of land separating the estuarine waters from inland areas. Areas subject to sever storm damage include Snug Harbor and Holiday Island two of the largest subdivisions in the county. Numerous new subdivisions have been platted in the last year; however, substantial resdential construction has not taken place as yet.

Damege from a severe Category III Storm is estimated at five million dollars.

Estuarine Shoreline

Land uses in this area are water related: private piers, boat docks, and bulkheading. Most development near this shoreline is protected somewhat from the damaging storm forces by this strip of land. The Perquimans County estuarine shoreline is rather steep, rising 6 to 10 feet above mean sea level.

Wave damage and shoreline erosion cause the most damage to the shoreline, with the Albemarle shore receiving the greatest damage. The map above shows the damage suffered in Perquimans County from hurricanes Hazel, Connie, and Ione. As is shown, the wave action along the estuarine shore caused the only damage in the county from the storms.

As is indicated on the Composite Hazard Map, flooding along the Perquimans River south of Hertford is unaffected by differences in storm intensity. The affected area is the same for either a category I, II, or III storm.

Coastal Wetlands

Flooding and high winds cause the most damage to the coastal wetlands areas in Perquimans County. These areas are not mapped but are generally located in the swamp areas at the mouths of the major creeks draining into the estuarine waters located south of Hertford.

There is no existing development in these areas except decks and walkways leading to piers and docks near the mouth of these streams.

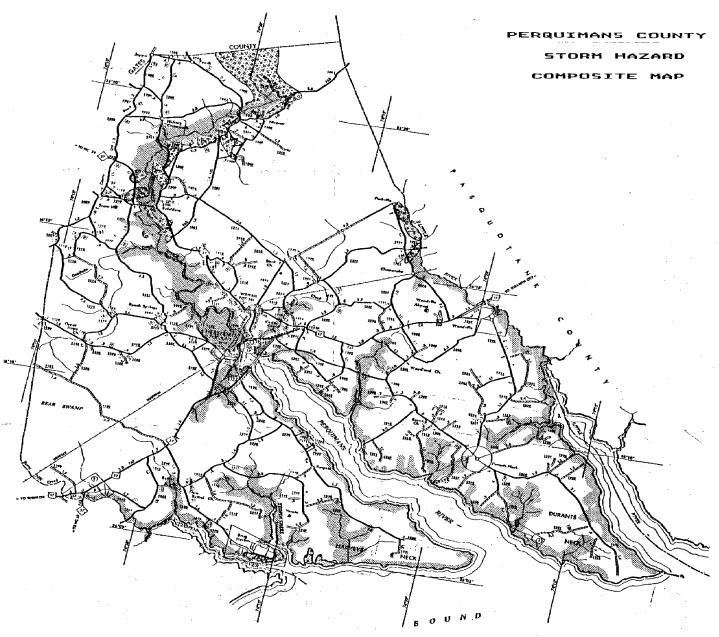
Flood Hazard Areas

The risk and magnitude of flood damage is greatest north of the US 17 By-Pass bridge, south of Hertford. This flood plain area affects much of Hertford and Winfall, the county's two largest concentrations of developed lands. Most damage from flooding will occur in these two incorporated areas and in the transitional lands immediately adjacent. River bank elevations do not rise as sharply north of Hertford, so the flood plain broadens significantly; however, much of this flood plain is wooded swamps and marshland with no development.

The Rest of the Community

High winds cause most of the property damage in Perquimans County, simply because they affect all properties. Damage is of two types:

- 1) direct wind damage, and
- 2) indirect wind damage from downed trees, wind-born debris, and downed utility lines. Wind damage potential increases almost exponentially as the number of mobile homes in the county increases.



The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management,

National Oceanic and Atmospheric Administration.

LEGEND

CATEGORY I STORM

CATEGORY II & III STORM

**Information taken from The

Division of Emergency Management

Slosh Map

EVACUABILITY

Most serious evacuation needs are in the county's two largest Sound front subdivisions, Snug Harbor and Holiday Island. These areas are the most heavily populated and most remote residential areas in the county. The evacuating routes from these two areas are all weather-paved secondary state roads. The evacuating routes are SR 1340 from Snug Harbor and SR 1347, 1339, and 1340 from Holiday Island. These roads are at all points above the 100-year flood plain elevation.

POLICY STATEMENTS: STORM HAZARD MITIGATION

ISSUE: Mitigation of Storm Damage From High Winds, Flooding, Wave Action, and Erosion

FINDINGS:

County areas affected by the various storm hazards are as follows:

Hazard Area Affected

High Wind Entire County

Flooding 100-year Flood Hazard Area

Coastal Wetlands Estuarine Shorelines

Wave Actions Estuarine Shoreline

Erosion Estuarine Shorelines

The greatest collective damage is from wind damage because the whole county is affected. Most seriously affected developed areas are those with property improvements in flood plains areas. Greatest risk potential is the estuarine shoreline.

POLICY:

It will be the policy of Perquimans County to enforce all controls and regulations it deems necessary to mitigate the risk of severe storms and hurricanes to life and property.

Implementation Strategies:

1) High Winds

Perquimans County will follow and support the N.C. State Building Codes and their requirements regarding design for high winds. The County also supports requirements for trailers such as tie-downs that help reduce wind damage.

2) Flooding

Perquimans County will support the hazard mitigation elements of the National Flood Insurance Programs. Perquimans County, which is in the regular phase of this program, supports regulations regard-ing elevation and flood-proofing of buildings and utilities. The county also supports CAMA and 404 Wetland Development Permit processes.

3) Wave Action and Shoreline Erosion

Perquimans County continues to support CAMA permitting procedures concerning the estuarine shoreline. The County also supports the FEMA regulations concerning elevation and setback requirements.

POST DISASTER AND RECOVERY PLAN

Perquimans County proposes the following Disaster Recovery Plan as a general outline of the procedures the County will follow in the event of a major disaster. The plan includes a timetable for carrying out recovery activities and a list of personnel who will be responsible for each component of the plan.

PURPOSE:

This plan has been developed to provide for an orderly and coordinated recovery and reconstruction of areas of Perquimans County suffering the effects of a major disaster. The under-lying goals of this plan are to minimize the hardship to affected residents, to restore and initiate reconstruction in a timely manner, and to reduce or eliminate any bottlenecks in securing Federal or State Disaster Assistance.

ORGANIZATION:

The Board of County Commissioners will function as the Perquimans County Recovery Task Force. The mission of the task force is to direct and control recovery activities and to formulate recovery policies as needed.

SUPPORT TEAM:

The County Commissioners will designate the following Recovery Support Team to assist in the implementation of this plan. The mission of the support team is to provide personnel and resources for the implementation of recovery activities as directed by the Recovery Task Force.

SUPPORT TEAM COMPOSITION AND RESPONSIBILITIES:

Perquimans County Manager: To manage, control, and coordinate the efforts of the support team.

Sheriff: To provide additional surveillance in the disaster area; to locate obstructions to traffic; and to advise the County Manager of the location of downed transmission lines, ruptured water lines, etc.

Tax Supervisor: To provide and direct personnel in carrying out damage assessment; to prepare damage assessment reports for the Recovery Task Force; and to revise property records.

- **Building Inspector:** To assemble personnel and to conduct a survey of structural conditions in the disaster area; to coordinate actions with the Tax Supervisor, and to prepare structural damage reports and classifications of damages.
- Social Services Director: To provide personnel to assist in finding shelter for persons who are homeless; to assist applicants in requesting aid from various state and federal agencies providing disaster relief.
- County Health Officer: To conduct damage assessment of on-site water supplies and sewage disposal systems; to prepare damage reports; and to make recommendations concerning restoration and reuse of on-site systems.
- Water Service Director: To conduct assessment of public utilities; to assemble personnel for clean up; and to organize and direct the restoration of public utility service.

SCHEDULE OF ACTIVITIES

Recovery activities will consist of two types: pre-planned activities that can begin immediately or as soon as is reasonably possible after the storm has passed; and long-term, permanent reconstruction activities that will be begun once the extent of the damage is known.

IMMEDIATE ACTION:

- 1) Declare a moratorium on all repairs and development
- 2) Begin clean-up and debris removal
- 3) Coordinate the restoration and repair of electrical service to affected areas
- 4) Begin Emergency repairs of essential public facilities
- 5) Maintain additional surveillance and extra security measures in affected areas
- 6) Deploy assessment teams
- 7) Prepare assessment reports

These immediate actions should be completed within ten days of the storm event.

LONG TERM RECONSTRUCTION ACTIONS:

- 8) Evaluate, classify, and map damages
- 9) Review of moratorium decision
- 10) Establish priorities for public facilities repair
- 11) Submit damage report to State and Federal agencies
- .12) Notify affected property owners of damage classifications and required repairs
- 13) Lift moratorium on repairs not requiring permits
- 14) Lift moratorium on siting of replacement mobile homes

- 15) Lift moratorium on conforming structures requiring major repairs
- 16) Assist affected property owners with damage registration and filing request for disaster relief
- 17) Negotiate with property owners needing improvements to on- site water and sewage systems
- 18) Lift moratorium on repairs and new development

The duration of the reconstruction and recovery period will depend on the nature and extent of the storm damage. Repairs of minor structural damages should be able to commence within two weeks of the storm event.

DAMAGE ASSESSMENT

As soon as possible after the storm, the assessment teams will be deployed to measure the extent and nature of the damages and to classify structural damages to individual structures. The inspection teams will consist of the County Building Inspector, the County Health Officer, and the Director of the County Water System.

The assessment will not be detailed, but will provide an initial overview of the scope of storm damages, an inventory of affected properties, and a preliminary assessments of the extent of damages to individual structures. Detailed inspections are being sacrificed in an effort to save time in beginning restoration activities and in securing disaster relief from various State and Federal Agencies offering financial assistance.

DAMAGE CLASSIFICATIONS

Structural damages will be classified in the following manner:

Destroyed - if estimated repair costs exceed 75% of assessed value

Major Repairs - if estimated repair costs exceed 30% of assessed value

Minor Repair - if estimated repair costs are less than 30% of assessed value

RECONSTRUCTION DEVELOPMENT STANDARDS

In general, all units requiring major repairs and all new construction shall comply with all development regulations in force at the time repair or new construction is initiated. This shall include compliance with all provisions of the building code governing construction in 100 mph wind velocity zones; regulations concerning development in designated Special Flood Hazard Areas; and all Health Department Regulations regarding on-site septic systems.

The lone exception to this general rule concerns the application of development restrictions on affected residential lots smaller than 15,000 square feet (the minimum lot size required by the County Health Department). Where structures on these substandard sized lots have been classified as either "destroyed" or requiring "Major Repair" as a result of the storm damage, the County shall make a determination concerning reconstruction and reuse with or without improvements to the on-site disposal system on a case basis.

DEVELOPMENT MORATORIA

The immediate development moratoria will remain in effect until the assessment reports are completed and the scope and nature of the storm damage has been fully reviewed by the County Commission. The County Commission at that time may rescind or extend the duration of the moratoria based on their assessment of the situation. Such decisions of the Commission may affect all or any portion of the county.

The purpose of the immediate moratoria is basically to relieve the work burden of the support team during the initial phase of the recovery period

LAND CLASSIFICATION SYSTEM AND MAP: PERQUIMANS COUNTY

The land classification system presented here provides the mechanism for implementing the county's development policies according to geographical areas of the county. The Perquimans County land classification system is based on the standardized CAMA land classification system. Through this system, the local government designates general geographical areas of the county for preferred types of development and for preferred and anticipated levels of growth. The policy statements and implementation strategies stated in this plan are then applicable to areas of the county containing resources that have been identified for protection or development. The land classification system is not a regulatory instrument, but a general application guide for the county's growth policy.

Land Classification Map

The land classification map provided here gives local governments and the general public a convenient reference for identifying those geographic areas of the county designated for specified types, levels, and patterns of development.

Land Classification Districts

The CAMA land classification system contains five broad development districts: developed, transitional, community, rural, and conservation. This system emphasizes the timing of development of growth rather than the establishment of severe use restrictions.

Land Classification Districts

Developed:

The statutory purpose of the developed classification is "to provide for continued intensive development of existing cities" [NCAC 15: 7B .0204 (d)(1)(A)].

The regulations also establish specific qualifying densities for this district as well as specific land use characteristics. The only area in Perquimans County meeting the regulatory description of this district is the incorporated town of Hertford. Although the town of Winfall exhibits the urban characteristics of mixed land uses and public water and sewer services, it does not meet the density requirement of the regulations. Winfall, therefore, will not be here classified as developed for planning purposes. The developed land classification, then, is composed only of the incorporated areas of Hertford. Permitted development is regulated by the Hertford zoning ordinance.

Transition:

The stated purpose of the transition class is "to provide for future intensive urban developments on lands that are suitable and that will be provided with necessary urban services..." [NCAC 15: 7B .0204 (d)(2)(A)]. The discussions in the regulations go on to mention that transition areas can be provided with public water and sewer service.

Perquimans County is designating Winfall, the areas adjacent to Hertford and Winfall, and the two larger residential subdivisions of Snug Harbor and

Holiday Island as transitional areas. Snug Harbor and Holiday Island have many developed, sub-standard sized lots. A community sewer system may be necessary during the planning period.

Community:

CAMA regulations define the community district as mixed use, low-intensity, clustered development generally associated with rural crossroads communities.

In Perquimans County, the areas designated as community are all existing crossroads communities that exhibit clustering; this is essentially all land areas with more than three adjacent minimum-sized lots of record. The minimum lot size in the county is 15,000 square feet if served by public water and 20,000 square feet if an on-site water supply is used.

These areas include all existing crossroads and platted subdivisions not included in the developed or transitional classifications.

Rural Service:

The stated purpose of the rural district is "to provide for agricultural, forestry, mineral extraction, and various low-intensity uses on large sites including low density dispersed residential uses. . ." [NCAC 15: 7B .0204 (d)(4)(A)].

The regulations indicate that development in these areas will use on-site water supplies and waste-water disposal systems. The County has made public water available to all of the county; therefore, the county has created a rural service sub-district to provide public water to the type development described in the CAMA rural classification. The rural service district covers most of the county.

Conservation:

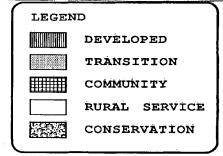
The stated purpose of the conservation class is "to provide for effective long-term management and protection of significant, limited, or irreplaceable areas" [NCAC 15: 7B .0204 (d) (5) (A)].

In Perquimans County, conservation areas include all areas of environmental concern designated by CAMA, all 404 wetlands, all Storm Hazard Areas identified on the Composite Hazard Map, and all areas below the 100-year flood elevation.

All land uses that can be permitted under the existing regulations of the various state, federal, and local governmental agencies with jurisdiction are allowed in the conservation district.

CLASSIFICATION

The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management Program through funds provided by the Coastal Zone Management Act of 1972 as amended, which is administered by the Office of Ocean and Coastal Resources Management, National Oceanic and Atmospheric Administration.



PERQUIMANS COUNTY

RELATIONSHIP BETWEEN LOCAL POLICIES AND LAND CLASSIFICATION

All policies developed during this planning process and formally stated in this document have consistently emphasized the County's intent of relying on existing local development regulations and on the various state and federal agencies with jurisdiction.

The land classification system provided in this document makes no restrictions on land use. Any development is permitted on any site if such development complies with existing local regulations and with the various permit requirements of the state and federal agencies with jurisdiction.

INTER-GOVERNMENTAL COORDINATION

The Perquimans County land use update also establishes the policies and the land classification system for the Town of Winfall. The Town of Hertford is currently updating its own land use plan. Perquimans County has designated areas adjacent to Hertford and Winfall as transitional lands. It is not the County's intention to limit the growth of either of these two communities to the transitional area shown on the map. Either town can certainly extend their public services beyond those areas indicated on the map should they choose to do so.

APPENDIX 1 SAMPLE QUESTIONNAIRE & SURVEY SUMMARY OPINION SURVEY: PERQUIMANS COUNTY C.A.M.A. LAND USE UPDATE

The following survey is to gather opinions from a sampling of Perquimans County residents concerning specifiand use issues. This survey is totally confidential and we request that you do not sign your name to this document. We do,however, need to know the general location of your residence. Please do not omit your zip code or the township information requested.

OPINION SURVEY

1.	In which township do you live? (Circle One)
	20 a. Belvidere 25 b. Bethel 40 c. Hertford 28 d. New Hope 29 e. Parkville
2.	What is your zipcode?
3.	What is your sex, race, age group, and marital status?
	105 WHITE 34 BLACK 59 MALE 65 FEMALE 94 MARRIED 22 SINGLE 7 DIVORCED 11 WIDOWED
	Age Group (circle One)
	6 a. 15-19 46 d. 30-39 7 g. 60-64 11 b. 20-24 24 e. 40-55 10 h. 65-70 14 c. 25-29 7 f. 55-59 9 i. 75+
4.	How large is your household?
	16 1 person 29 2 persons 60 3 or 4 people 37 5+ persons
5.	How long have you lived in Perquimans County?
	29 less than 5 years
	205-10 years
	92 more than 10 years
6.	Do you live in a mobile home? 35 yes 103 no
7.	Where are you employed?
	a. Perquimans County b. Adjacent Counties c. Tidewater d. Unemployed e. Retired
8.	Are you self employed? 34 yes 103 no

1986 Perquimans County Land Use Plan Update

9.	Do you farn	n? <u>9 </u>	yes	<u>131</u>	no				
10.	Is farming ye	our pri	mary so	urce of	income	? <u>7</u>	ipplemental	? 5	
11.	How many a 131 a)nor 2 e). 5	ne	you fa <u>4</u>		-100	<u>4</u> c)	.100-300	0	_d(300-500
12.	Where do you				ater?	b.well	4	_c. oth	ier
13.	What type of 33 a. Pu					ou use? eptic system	<u> 2</u>	_c. oth	er
14.	Have you ha			with yo		c system in t	the past 5 ye	ears?	
15.	Has your ho			een floo					
16.	Do you carry 18 a.yes		insuran <u>120</u>			e and its con	tents?		
17.		rowth v sidentia dustrial	d <u>2</u>		easonal l		2c. con	nmercia	1
18. V	Vhere do you d	lo mos	t of you	r shopp	ing?				
	37_a.Perqu	imans (County	74	_b. Adja	cent counties	s <u>7_</u> c. T	idewate	r area
19. V	Vhere do you r Choose from A. Perquima B. Edenton	n one of ins Cou	f the fol				·		
	C. Elizabeth D. Virginia	City							
	E. Other(Ple	_		D	E				
	A 32	B 7	<u>C</u>	D 23	19	1. Auto	mobiles		
	37	5	42	19	13	2. Furn	iture		
	26	7	73	14	4	3. Clot			
	38	10	65	2	88		ding Materia	als	
	45	28	44	1	4	5. Groo		,	
	50	9	47	4	7		ing & Plum	bing Eq	uipment
	11	8	62_	12	21	7. Enter	rtainment		
	25	6	13	1	68	o. Diffe	Out		

How would you rank the following answers to the statement:

Improved Economic growth in Perquimans County can best be accomplished by:

Rank answers from 1 to 5, with 1 being the favored response

1	2	3	4	5
81	22	12	6	14_
17	17	31	36	32
21	16	31	33	31
54	44	20	8	6
26	15	30	17	43

- a Increasing manufacturing employment in the county
- b. Increasing the number of tourists and summer residents in the county
- c. Increasing population growth
- d. Increasing the number of businesses in the county
- e. Increasing farming activities

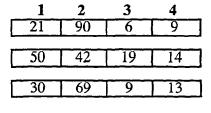
Which of the following activities will best enable Perquimans County to achieve economic growth? Rank answers from 1 to 3

1	2	3
60	29	33
27	56	41
61	25	38

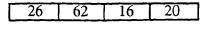
- a. Expand the county's market area
- b. Increase the population in the existing market area
- c. Increase disposable income within the present market

What is your opinion on the following statements? Choose one of the following for each statement.

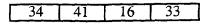
- 1. Slightly agree
- 2. Strongly agree
- 3. Slightly disagree
- 4. Strongly disagree



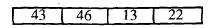
- A. Perquimans County needs more manufacturing industries.
- B. Tourism and second home development should be promoted.
- C. Perquimans County should provide additional sites where the public has access to the county's waterways without crossing private property.



D. Perquimans County should use code enforcement and other means to eliminate dilapidated and deteriorated housing in the community.



E. Perquimans County should provide some means to protect residential areas from the nuisance and hazards of large livestoc operations.

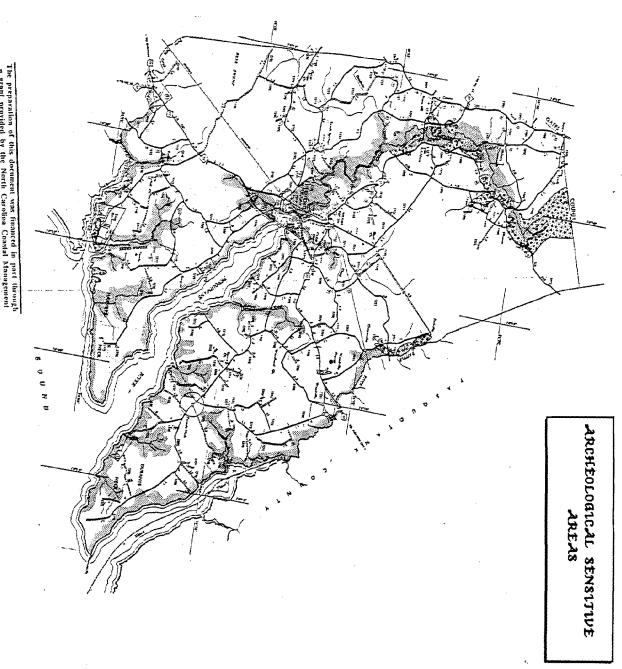


F. Existing livestock operations should be protected from the intrusion of residential subdivision development.

1986 Perquimans County Land Use Plan Update

21 58 14 29	G.	The location, size, and development of mobile home parks should be controlled.
33 45 14 26	H.	Perquimans County should adopt zoning regulations.
24 66 13 20	I.	New development in the county should occur near existing populated areas such as Courthouse township, South Mills, and Shiloh.
44 17 22 39	J.,	New development in the county should occur along the shorelines.
30 55 13 24	K.	New commercial development should be allowed to occur anywhere along Highway 17.

PLEASE FEEL FREE TO MAKE COMMENTS OR TO EXPRESS ANY OF YOUR CONCERNS ABOUT PERQUIMANS COUNTY.



The preparation of this document was financed in part through a grant provided by the North Carolina Coastal Management a grant through funds provided by the Coastal Zone Program through funds provided by the Coastal Zone

DATE DUE				
	an dental and the second section of the second section is a second second second second second second second se	and the contract of the second	The state of the s	
	٠,			
	_			
	- :			
	•			
	=			
	*			
	<u> </u>	†		
GAYLORD	No. 2333			PRINTED IN U.S.A.

